

LLNL Livermore Site First Quarter 2009 Self-Monitoring Report

The following is the first quarter 2009 self-monitoring data for the treatment facilities and Lake Haussmann at the Lawrence Livermore National Laboratory (LLNL) Livermore Site. During the quarter, a schedule to restart non-operational treatment facilities was established and new Federal Facilities Agreement (FFA) Remedial Action Implementation Plan (RAIP) milestones were defined. On March 18, 2009, a revised Consensus Statement for Environmental Restoration of Lawrence Livermore National Laboratory Site (March 2009) was signed by the Department of Energy (DOE) and the LLNL Livermore Site Remedial Project Managers (RPMs).

The following treatment facilities were restarted during the quarter, meeting the four, newly-established March 31, 2009 FFA milestones: TFA, TFC Southeast, TFE Hotspot, and VTF406 Hotspot. In addition, the following facilities continued to operate during the first quarter 2009: TFA East, TFB, TFC, TFD East, TFD Southeast, TFD Southshore, TFD West, TFE Northwest, TFE Southwest, TFE West, TFG-1, and TF406. TFA West was shutdown in January 2008 after a year-long treatability test and is operational only during monthly sampling events.

The volumes of ground water and soil vapor treated and volatile organic compound (VOC) mass removed during the first quarter of 2009 are presented in Tables 1 and 2, respectively. An historical summary of VOC volume and mass removed are presented in Tables 3 and 4, respectively.

Attachment A presents ground water treatment facility and extraction well (ground water and soil vapor) VOC, chromium, bioassay, turbidity and chloride analyses (Tables A-1 through A-5). Metals and radiological analyses are presented in Tables A-6 and A-7, respectively. During the first quarter of 2009, all effluent sample analyses were within acceptable discharge limits. An addendum presenting analytical results from extraction wells associated with treatment facilities that were restarted during this reporting period and nearby monitor wells is included at the end of Attachment A.

Self-monitoring reports for all treatment facilities are presented in Attachment B. Monthly volumes of ground water extracted are shown in Attachment B; however, instantaneous flow rates are not shown for wells that are now only used for sampling and are not continuously pumped. The monthly volume shown for these wells is the quantity of water evacuated for sampling purposes. Monitoring data for Lake Haussmann are presented in Attachment C.

A well location map showing wells and treatment facilities, and ground water elevation contour maps showing hydraulic capture zones for hydrostratigraphic units (HSUs) 1B, 2, 3A, 3B, 4, and 5, are presented in Attachment D. There were no new monitoring wells installed during this reporting period. The contour maps for the individual HSUs are based on data collected during January 2009, prior to the restart of TFA, TFC Southeast, and TFE Hotspot.

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Table 1. Volumes of ground water and soil vapor extracted and treated at the Livermore Site, January through March 2009.

Treatment Area^a	Month	Volume of ground water extracted (Kgal)^b	Volume of vapor extracted (Kft³)^b
TFA	January	315	-
	February	800	-
	March	6,332	-
TFB	January	1,936	-
	February	1,988	-
	March	2,350	-
TFC	January	2,405	-
	February	2,224	-
	March	2,870	-
TFD	January	1,907	0
	February	1,831	0
	March	2,048	0
TFE	January	1,501	0
	February	1,625	0
	March	1,950	0
TFG	January	385	-
	February	359	-
	March	405	-
TFH	January	700	0
	February	653	0
	March	739	352
TOTAL^c		35,323	352

^a Totals include ground water and soil vapor extracted from the following facilities:

TFA area: TFA, TFA-E, TFA-W

TFB area: TFB

TFC area: TFC, TFC-E, TFC-SE

TFD area: TFD, TFD-E, TFD-HPD, TFD-S, TFD-SE, TFD-SS, TFD-W, VTFD-ETCS, VTFD-HPD, VTFD-HS

TFE area: TFE-E, TFE-HS, TFE-NW, TFE-SE, TFE-SW, TFE-W, VTFE-ELM, VTFE-HS

TFG area: TFG-1, TFG-N

TFH area: TF406, TF406-NW, TF518-N, TF518-PZ, TF5475-1, TF5475-2, TF5475-3, VTF406-HS, VTF511, VTF518-PZ, VTF5475

TFF started operation in February 1993 for fuel hydrocarbon remediation. In August 1995, the regulatory agencies agreed that the vadose zone remediation was complete, and in October 1996 a No Further Action status was granted for the ground water.

^b Totals are derived from individual extraction wells shown in Attachment B

^c Rounded number

Kft³ = thousands of cubic feet

Kgal = thousands of gallons

Table 2. VOC mass removed at the Livermore Site, January through March 2009.

Treatment Area^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) ^b
TFA	0.5	-	0.5
TFB	0.7	-	0.7
TFC	1.1	-	1.1
TFD	4.0	0	4.0
TFE	1.6	0	1.6
TFG	0.08	-	0.1
TFH	0.07	0.3	0.4
TOTAL^b	8.1	0.3	8.4

Table 3. Historical summary of volumes of water and soil vapor removed at the Livermore Site through March 2009.

Treatment Area^a	Volume of ground water extracted (Mgal)	Volume of vapor extracted (Kft³)
TFA	1,573	-
TFB	364	-
TFC	369	-
TFD	832	49,708
TFE	305	124,223
TFG	59	-
TFH	132	163,561
TOTAL^b	3,634	337,492

Table 4. Historical summary of VOC mass removed from water and soil vapor at the Livermore Site through March 2009.

Treatment Area^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) ^b
TFA	194	-	194
TFB	72	-	72
TFC	89	-	89
TFD	768	84	852
TFE	202	141	343
TFG	10	-	10
TFH	29	1,128	1,157
TOTAL^b	1,364	1,353	2,717

^a Refer to Table 1 footnote for facilities in each treatment facility area.^b Rounded number.

Abbreviations for Tables 2, 3 and 4:

Kft³ = thousands of cubic feet.

Kg = Kilograms.

Mgal = millions of gallons.

VOC = Volatile organic compound.

Attachment A

**VOC, Chromium, Bioassay,
Turbidity, Chloride, Metals, and Radiological Analyses**

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFA^a													
TFA-I001	14-JAN-09	E601	<0.5	1.4	<0.5	<0.5	<0.5	<1	<0.5	46	<0.5	1.4	<0.5
TFA-I001	21-JAN-09	E601	<0.5	0.93	0.5	<0.5	0.9	<1	<0.5	11	<0.5	0.81	<0.5
TFA-I001	22-JAN-09	E601	<0.5	1	0.5	<0.5	0.95	<1	<0.5	10	<0.5	0.86	<0.5
TFA-I001	02-FEB-09	E624	<1	1.5	<1	<1	1.5	<1	<1	9.4	<1	1.1	<1
TFA-I001	02-MAR-09	E601	<0.5	1.6	0.58	<0.5	1.4	<1	<0.5	10	<0.5	0.98	<0.5
TFA-E001	14-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E001	02-FEB-09	E624	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
TFA-E001	02-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E													
W-254	07-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	61	<0.5	1.7	<0.5
STU06-I	03-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	0.59	<1	<0.5	54	<0.5	1.6	<0.5
STU06-I	10-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	0.61	<1	<0.5	53	<0.5	1.6	<0.5
STU06-E	07-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
STU06-E	03-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
STU06-E	10-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-W^b													
W-404	14-JAN-09	E601	<0.5	<0.5	1.7	<0.5	2.5	<1	<0.5	11	<0.5	<0.5	<0.5
W-404	24-FEB-09	E601	<0.5	<0.5	1.8	<0.5	3	<1	<0.5	11	<0.5	0.6	<0.5
W-404	19-MAR-09	E601	<0.5	<0.5	1.8	<0.5	2.8	<1	<0.5	11	<0.5	0.56	<0.5
TFA-W-E	14-JAN-09	E624	<1	<1	1.7	<1	2.5	<1	<1	11	<1	0.51	<1
TFB													
TFB-I002	06-JAN-09	E601	0.52	1.9	<0.5	<0.5	1.5	<1	3.4	1.3	<0.5	11	<0.5
TFB-I002	03-FEB-09	E601	0.58	2.5	<0.5	<0.5	2	<1	3.9	1.8	<0.5	16	<0.5
TFB-I002	03-MAR-09	E601	0.6	2.7	<0.5	<0.5	2	<1	3.8	1.8	<0.5	15	<0.5
TFB-E002	06-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	03-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	03-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC													
TFC-I003	08-JAN-09	E601	<0.5	1.4	<0.5	<0.5	0.96	<1	12	6.2	<0.5	16	<0.5
TFC-I003	03-FEB-09	E601	<0.5	1.6	<0.5	<0.5	1.3	<1	13	6.1	<0.5	16	<0.5
TFC-I003	03-MAR-09	E601	<0.5	1.6	<0.5	<0.5	1.2	<1	14	6.5	<0.5	17	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFC (cont.)													
TFC-E003	08-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	03-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	03-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E^{cd}													
MTU1-I	19-FEB-09	E601	<0.5	16	<0.5	<0.5	1.1	<1	18	2.8	<0.5	23	7.3
MTU1-I	02-MAR-09	E601	<0.5	16	<0.5	<0.5	1	<1	18	2.8	<0.5	23	7.6
MTU1-I	09-MAR-09	E601	<0.5	15	<0.5	<0.5	0.95	<1	17	2.6	<0.5	22	6.8
MTU1-E	19-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	02-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-SE^e													
PTU1-I	08-JAN-09	E601	<0.5	9.2	<0.5	<0.5	1.2	<1	13	0.51	<0.5	14	1.3
PTU1-I	09-JAN-09	E601	<0.5	8.9	<0.5	<0.5	1.4	<1	14	0.54	<0.5	17	1.3
PTU1-I	12-JAN-09	E601	<0.5	9	<0.5	<0.5	1.4	<1	14	0.51	<0.5	17	1.3
PTU1-I	17-FEB-09	E601	<0.5	8.1	<0.5	<0.5	4.3	<1	7.2	<0.5	<0.5	26	0.5
PTU1-I	18-MAR-09	E601	<0.5	8.7	<0.5	<0.5	2.9	<1	16	0.6	<0.5	24	1.2
PTU1-E	08-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	17-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	18-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD^f													
TFD-I004	16-MAR-09	E601	0.63	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	14	5.6
TFD-E004	16-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E													
PTU8-I	12-JAN-09	E601	6.5	1.6	0.71	2.3	15	<1	0.84	12	<0.5	160	<0.5
PTU8-I	05-FEB-09	E601	5.3	3	0.91	4	13	<1	0.84	22	<0.5	140	<0.5
PTU8-I	19-MAR-09	E601	5.6	3.8	0.52	2.4	3.3	<1	0.82	18	<0.5	93	<0.5
PTU8-E	12-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	05-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	19-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-HPD^g	---	---	--	--	--	--	--	--	--	--	--	--	--
TFD-S^h													
PTU2-I	29-JAN-09	E601	7.5	2.6	0.8	<0.5	27	<1	3.8	11	<0.5	450	1.7
PTU2-I	16-MAR-09	E601	12	3.8	1.1	0.76	34	<1	4.7	13	<0.5	660	2.6
PTU2-E	29-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	0.56	<0.5
PTU2-E	16-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SE													
PTU11-I	12-JAN-09	E601	0.69	1.5	1.9	7.5	28	1.3	<0.5	110	<0.5	220	<0.5
PTU11-I	05-FEB-09	E601	0.71	1.8	2.2	7.4	38	1.7	<0.5	100	<0.5	230	<0.5
PTU11-I	03-MAR-09	E601	0.71	1.8	2.1	7.4	37	1.6	<0.5	100	<0.5	260	<0.5
PTU11-E	12-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	05-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	03-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SS													
PTU12-I	13-JAN-09	E601	3.1	3	<0.5	1.4	8.4	<1	1.1	22	<0.5	130	7.2
PTU12-I	04-FEB-09	E601	3.2	3.2	<0.5	1.4	11	<1	1.3	22	<0.5	130	6.7
PTU12-I	09-MAR-09	E601	3.2	3.2	<0.5	1.2	10	<1	1.2	21	<0.5	130	7.9
PTU12-E	13-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	04-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	09-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-W													
PTU6-I	14-JAN-09	E601	0.57	3.4	<0.5	<0.5	<0.5	<1	0.57	<0.5	<0.5	7.2	88
PTU6-I	04-FEB-09	E601	0.59	3.6	<0.5	<0.5	<0.5	<1	0.56	<0.5	<0.5	8.4	86
PTU6-I	09-MAR-09	E601	0.6	3.5	<0.5	<0.5	<0.5	<1	0.52	<0.5	<0.5	9.1	82
PTU6-E	14-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	04-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	09-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-Eⁱ	---	---	--	--	--	--	--	--	--	--	--	--	--

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-HS^j													
GTU07-I	27-JAN-09	E601	<0.5	0.78	<0.5	<0.5	3.4	<1	9.3	26	<0.5	310	<0.5
GTU07-I	12-FEB-09	E601	<0.5	1.2	<0.5	<0.5	6.5	1	18	32	<0.5	460	<0.5
GTU07-I	24-FEB-09	E601	1.3	2	<0.5	<0.5	8.9	2.8	8.5	16	<0.5	260	<0.5
GTU07-I	10-MAR-09	E601	<0.5	1	<0.5	<0.5	7.1	<1	22	39	<0.5	370	<0.5
GTU07-E	27-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	12-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	24-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	10-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	19-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-NW													
PTU9-I	12-JAN-09	E601	0.59	2	<0.5	<0.5	<0.5	<1	0.84	<0.5	<0.5	14	<0.5
PTU9-I	04-FEB-09	E601	0.58	2.6	<0.5	<0.5	<0.5	<1	0.87	<0.5	<0.5	13	<0.5
PTU9-I	09-MAR-09	E601	0.63	3.5	<0.5	<0.5	0.52	<1	0.88	<0.5	<0.5	14	<0.5
PTU9-E	12-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	04-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	09-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SE^k													
W-359	19-MAR-09	E601	0.86	<0.5	<0.5	<0.5	6.4	<1	12	2.4	<0.5	44	<0.5
TFE-SW													
MTU03-I	08-JAN-09	E601	5.1	3.4	<0.5	0.94	4.2	3.6	0.59	5.2	<0.5	200	<0.5
MTU03-I	03-FEB-09	E601	5.7	4.8	<0.5	1.3	5.7	5.6	0.59	6.3	<0.5	180	<0.5
MTU03-I	02-MAR-09	E601	7.5	5.4	0.53	1.4	7.1	6.1	0.78	7.4	<0.5	210	<0.5
MTU03-E	08-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	03-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	02-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-W													
MTU05-I	07-JAN-09	E601	<0.5	1	<0.5	<0.5	2.5	1.4	18	6.8	<0.5	37	0.61
MTU05-I	03-FEB-09	E601	<0.5	1	<0.5	<0.5	2.5	1.6	16	5.7	<0.5	33	<0.5
MTU05-I	04-MAR-09	E601	<0.5	1	<0.5	<0.5	2.3	1.5	14	5.4	<0.5	29	<0.5
MTU05-E	07-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU05-E	03-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-W (cont.)													
MTU05-E	04-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFG-1													
W-1111	12-JAN-09	E601	2.9	9.8	<0.5	<0.5	0.96	<1	<0.5	1.4	<0.5	4.3	<0.5
GTU01-I	05-FEB-09	E601	2.7	11	<0.5	<0.5	1.3	<1	0.55	1.3	<0.5	4.2	<0.5
GTU01-I	18-MAR-09	E601	2.9	11	<0.5	<0.5	1.2	<1	0.57	1.5	<0.5	4.4	<0.5
GTU01-E	12-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	05-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	18-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFG-N^l	---	---	--	--	--	--	--	--	--	--	--	--	--
TF406													
PTU5-I	13-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	5.9	<0.5
PTU5-I	05-FEB-09	E601	<0.5	0.57	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	6	<0.5
PTU5-I	10-MAR-09	E601	<0.5	0.97	<0.5	<0.5	<0.5	<1	0.62	<0.5	<0.5	8.5	<0.5
PTU5-E	13-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	05-FEB-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	10-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF406-NW^m	---	---	--	--	--	--	--	--	--	--	--	--	--
TF518-Nⁿ	---	---	--	--	--	--	--	--	--	--	--	--	--
TF5475-1^o	---	---	--	--	--	--	--	--	--	--	--	--	--
TF5475-2^p	---	---	--	--	--	--	--	--	--	--	--	--	--
TF5475-3^q	---	---	--	--	--	--	--	--	--	--	--	--	--

Notes on following page.

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

^a TFA includes pre-startup extraction well sampling and monthly sampling results.

^b TFA-W was shut down in January after a year-long treatability test; W-404 is operational only during routine sample collection.

^c TFC-E did not operate during the month of January.

^d TFC-E includes pre-startup extraction well sampling and monthly sampling results.

^e TFC-SE includes pre-startup extraction well sampling and monthly sampling results.

^f TFD did not operate during reporting period due to required maintenance however; initial sampling was performed on Mar. 16, 2009.

^g TFD-HPD did not operate during reporting period.

^h TFD-S did not operate during reporting period due to instrumentation issues however; initial sampling was completed on Mar. 16, 2009.

ⁱ TFE-E did not operate during reporting period due to a control system failure.

^j TFE-HS includes pre-startup extraction well sampling and monthly sampling results.

^k TFE-SE did not operate during January and February due to pump and control system failure however; initial wellfield sampling was completed Mar. 19, 2009.

^l TFG-N did not operate during reporting period due to a discharge pump control issue.

^m TF406-NW did not operate during reporting period due to low influent flow and bio-fouling at pump. (The facility is the third priority for pump replacement.)

ⁿ TF518-N did not operate during reporting period due to a mixed waste disposition issue.

^o TF5475-1 did not operate during reporting period due to a mixed waste disposition issue.

^p TF5475-2 did not operate during reporting period.

^q TF5475-3 did not operate during reporting period due to a mixed waste disposition issue.

Notes:

CCl₄ = Carbon tetrachloride

CHCl₃ = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFA													
W-109	14-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	2.1	<0.5	<0.5	<0.5
W-262 ^a	29-JAN-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.56	<0.5	<0.5	<0.5
W-408	14-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.8	<0.5	<0.5	<0.5
W-415	14-JAN-09	E601	<0.5	1.5	<0.5	<0.5	<0.5	<1	<0.5	38	<0.5	1.3	<0.5
W-457	02-FEB-09	E601	<0.5	<0.5	1.2	<0.5	1.5	<1	<0.5	8.4	<0.5	0.56	<0.5
W-518 ^a	24-APR-08	E601	<0.5	<0.5	7.3	<0.5	4	<1	<0.5	6.3	<0.5	0.67	<0.5
W-522 ^a	24-APR-08	E601	<0.5	<0.5	2.3	<0.5	1.5	<1	<0.5	3.5	<0.5	<0.5	<0.5
W-605	02-FEB-09	E601	<0.5	1	1.5	<0.5	2.3	<1	<0.5	25	<0.5	1.4	<0.5
W-614	14-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	6.1	<0.5	<0.5	<0.5
W-712	14-JAN-09	E601	4	3.9	1.2	<0.5	3.4	<1	<0.5	2.1	<0.5	4.8	<0.5
W-714	14-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	7.8	<0.5	<0.5	<0.5
W-903 ^a	29-JAN-08	E601	<0.5	<0.5	1.8	<0.5	1.4	<1	<0.5	7.5	<0.5	0.52	<0.5
W-904	02-MAR-09	E601	<0.5	<0.5	1	<0.5	1.6	<1	<0.5	11	<0.5	0.65	<0.5
W-1001	14-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.73	<0.5	<0.5	<0.5
W-1004	14-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	5.4	<0.5	<0.5	<0.5
W-1009	14-JAN-09	E601	0.82	3.5	0.93	<0.5	2.7	<1	<0.5	24	<0.5	2.2	<0.5
TFA-E													
W-254	07-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	61	<0.5	1.7	<0.5
TFA-W													
W-404	19-MAR-09	E601	<0.5	<0.5	1.8	<0.5	2.8	<1	<0.5	11	<0.5	0.56	<0.5
TFB													
W-357	06-JAN-09	E601	1.6	2.7	<0.5	<0.5	1.7	<1	6	1.6	<0.5	42	<0.5
W-610	06-JAN-09	E601	<0.5	0.69	<0.5	<0.5	2.7	<1	3.7	1.7	<0.5	4.9	<0.5
W-620 ^a	09-OCT-08	E601	<0.5	2	<0.5	<0.5	2.8	<1	3.4	2	<0.5	8	<0.5
W-621	06-JAN-09	E601	<0.5	0.9	<0.5	<0.5	0.67	<1	1.4	0.57	<0.5	5.2	<0.5
W-655	06-JAN-09	E601	<0.5	0.76	<0.5	<0.5	<0.5	<1	3.4	<0.5	<0.5	3	<0.5
W-704	06-JAN-09	E601	0.69	2.8	<0.5	<0.5	1.8	<1	5.4	3.7	<0.5	29	<0.5
W-1423	06-JAN-09	E601	0.88	5	<0.5	<0.5	3	<1	3.5	2	<0.5	11	<0.5
TFC													
W-701	08-JAN-09	E601	<0.5	3.2	<0.5	<0.5	2.4	<1	35	0.55	<0.5	13	0.56
W-1015	08-JAN-09	E601	<0.5	0.6	<0.5	<0.5	0.87	<1	2.1	1.2	<0.5	5.3	<0.5
W-1102	08-JAN-09	E601	<0.5	0.56	<0.5	<0.5	0.63	<1	12	<0.5	<0.5	2.9	<0.5
W-1103	08-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	1.9	<0.5
W-1104	08-JAN-09	E601	<0.5	0.89	<0.5	<0.5	<0.5	<1	5.2	13	<0.5	26	<0.5
W-1116	08-JAN-09	E601	<0.5	1.9	<0.5	<0.5	0.5	<1	7	3	<0.5	4.2	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFC-E													
W-368	02-MAR-09	E601	<0.5	16	<0.5	<0.5	1.1	<1	18	3	<0.5	24	7.9
W-413	19-FEB-09	E601	<0.5	10	<0.5	<0.5	0.89	<1	20	<0.5	<0.5	6.6	2.5
TFC-SE													
W-1213	18-MAR-09	E601	<0.5	8.5	<0.5	<0.5	4.5	<1	7.8	<0.5	<0.5	29	0.53
W-2201	18-MAR-09	E601	<0.5	9.2	<0.5	<0.5	1.8	<1	21	0.85	<0.5	21	1.6
TFD													
W-351	16-MAR-09	E601	5.5	1.1	<0.5	<0.5	2.5	<1	1.2	2.9	<0.5	120	<0.5
W-653 ^a	07-JUL-08	E601	40	12	<0.5	<0.5	1.5	<1	5.3	1.5	<0.5	1400	<0.5
W-906	16-MAR-09	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4	0.74
W-907-2	16-MAR-09	E601	0.59	5	<0.5	<0.5	3.2	<1	1.2	5.3	<0.5	67	<0.5
W-1206	16-MAR-09	E601	0.59	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	13	4
W-1208	16-MAR-09	E601	2.1	2.4	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	38	79
W-2011 ^a	04-APR-07	E601	3.1	2.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	77	<0.5
W-2101 ^a	04-APR-07	E601	17	5.2	<0.5	<0.5	0.68	<1	2.7	0.83	<0.5	450	<0.5
W-2102 ^a	04-APR-07	E601	28	9.7	<0.5	<0.5	0.74	<1	3.6	0.77	<0.5	840	1.8
TFD-E													
W-1253 ^{ab}	11-FEB-08	E601	6	6.2	<5	<5	16	<10	17	12	<5	2300	<5
W-1255 ^a	11-FEB-08	E601	4.4	2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	260	<0.5
W-1301 ^a	14-OCT-08	E601	5	2.7	3.2	11	84	1.2	0.66	46	<0.5	460	<0.5
W-1303 ^a	14-OCT-08	E601	3	2.9	0.8	3.1	7.2	<1	<0.5	6.7	<0.5	150	23
W-1306	19-MAR-09	E601	6.4	2.9	<0.5	<0.5	0.91	<1	0.6	3.6	<0.5	130	<0.5
W-1307	19-MAR-09	E601	1.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	23	<0.5
W-1404	19-MAR-09	E601	<0.5	17	2.2	17	12	2.9	<0.5	94	<0.5	180	0.71
W-1550	19-MAR-09	E601	16	4.2	<0.5	<0.5	3	<1	1.7	11	<0.5	180	<0.5
W-2006 ^a	14-OCT-08	E601	1.3	2.4	2.9	9.5	88	1.3	<0.5	83	<0.5	690	<0.5
W-2203	19-MAR-09	E601	15	2.5	<0.5	<0.5	3.6	<1	3.9	6.3	<0.5	150	<0.5
TFD-HPD^c													
W-1254 ^a	04-OCT-07	E601	0.88	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	14	<0.5
W-1551 ^a	04-OCT-07	E601	11	4.4	<0.5	<0.5	1.6	<1	3	3.1	<0.5	210	<0.5
W-1552 ^a	20-DEC-07	E601	<0.5	0.96	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	22	<0.5
W-1650 ^a	20-DEC-07	E601	7.1	1.8	<0.5	<0.5	<0.5	<1	2.6	<0.5	<0.5	260	<0.5
W-1651 ^a	20-DEC-07	E601	1.3	1.1	<0.5	<0.5	<0.5	<1	0.61	<0.5	<0.5	64	<0.5
W-1652 ^a	18-DEC-07	E601	3	2	<0.5	<0.5	<0.5	3.7	1	0.54	<0.5	420	<0.5
W-1653 ^a	18-DEC-07	E601	1.4	0.9	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	74	<0.5
W-1654 ^a	18-DEC-07	E601	<0.5	0.55	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	25	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-HPD (cont.)													
W-1655 ^a	18-DEC-07	E601	0.62	0.94	<0.5	<0.5	<0.5	<1	<0.5	1	<0.5	49	<0.5
W-1656 ^a	18-DEC-07	E601	2.5	0.97	<0.5	<0.5	<0.5	<1	0.88	<0.5	<0.5	100	<0.5
W-1657 ^a	18-DEC-07	E601	12	5.1	<0.5	<0.5	<0.5	<1	4.2	0.52	<0.5	1200	<0.5
TFD-S													
W-1503	29-JAN-09	E601	10	3.3	1.1	0.68	34	<1	4.6	11	<0.5	550	2.4
W-1504	29-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	17	<1	3.9	22	<0.5	100	<0.5
W-1510	29-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	1.3	<1	<0.5	1.5	<0.5	18	<0.5
TFD-SE													
W-314 ^a	07-JAN-08	E601	1.6	8.9	0.72	1.7	11	<1	5	21	<0.5	170	<0.5
W-1308	12-JAN-09	E601	<0.5	1.5	1.9	8.6	21	1.5	<0.5	110	<0.5	210	<0.5
W-1403 ^a	02-JUL-08	E601	2.9	19	1.5	6.6	51	<1	3.9	98	<0.5	430	<0.5
W-1904 ^a	26-DEC-07	E601	<0.5	<0.5	0.54	0.67	5.8	<1	<0.5	39	<0.5	42	<0.5
W-2005	12-JAN-09	E601	1.4	1.3	1.4	4	42	<1	<0.5	91	<0.5	240	<0.5
SIP-ETC-201 ^a	26-DEC-07	E601	<0.5	0.55	0.59	1.1	8.5	<1	<0.5	59	<0.5	60	<0.5
TFD-SS													
W-1523	13-JAN-09	E601	4.8	3.6	<0.5	1.5	12	<1	1.8	20	<0.5	190	<0.5
W-1601	13-JAN-09	E601	4	4	1.6	6.4	26	1.2	1.5	110	<0.5	310	<0.5
W-1602	13-JAN-09	E601	<0.5	1.9	<0.5	<0.5	<0.5	<1	<0.5	1.1	<0.5	15	19
W-1603 ^a	11-APR-08	E601	1.6	2	1.2	4.8	16	1.2	<0.5	33	<0.5	170	8.6
TFD-W													
W-1215 ^a	15-JUL-08	E601	<0.5	6.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	5.6	34
W-1216	14-JAN-09	E601	<0.5	3.3	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	6.7	56
W-1902	14-JAN-09	E601	0.64	3.4	<0.5	<0.5	<0.5	<1	0.55	<0.5	<0.5	8.2	100
TFE-E^c													
W-566 ^a	09-APR-08	E601	0.71	6.7	<0.5	<0.5	3.5	<1	9.4	4.4	<0.5	58	<0.5
W-1109 ^a	09-APR-08	E601	<0.5	0.58	0.51	<0.5	43	<1	7.9	71	<0.5	200	<0.5
W-1903 ^a	30-JUL-07	E601	<0.5	<0.5	<0.5	<0.5	23	<1	11	21	<0.5	36	<0.5
W-1909 ^a	30-JUL-07	E601	<0.5	<0.5	<0.5	<0.5	35	<1	10	48	<0.5	58	<0.5
W-2305 ^a	30-JUL-07	E601	<0.5	1.1	1.5	<0.5	99	<1	21	170	<0.5	380	<0.5
TFE-HS													
W-2012	19-MAR-09	E601	1.6	2.2	<0.5	<0.5	9	2.6	8.7	15	<0.5	260	<0.5
W-2105	27-JAN-09	E601	<0.5	0.62	<0.5	<0.5	<0.5	2.3	1.2	7.8	<0.5	210	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-NW													
W-1211	12-JAN-09	E601	0.62	2	<0.5	<0.5	<0.5	<1	0.79	<0.5	<0.5	14	<0.5
W-1409 ^a	10-APR-08	E601	<0.5	<0.5	<0.5	<0.5	1.2	<1	0.57	1.7	<0.5	30	<0.5
TFE-SE^c													
W-359	19-MAR-09	E601	0.86	<0.5	<0.5	<0.5	6.4	<1	12	2.4	<0.5	44	<0.5
TFE-SW													
W-1518 ^a	14-JUL-08	E601	<0.5	0.6	<0.5	<0.5	1.9	2.2	1.9	1.1	<0.5	17	<0.5
W-1520	08-JAN-09	E601	2	5.2	<0.5	1.1	1	54	<0.5	3.7	<0.5	100	<0.5
W-1522	08-JAN-09	E601	7.4	5	0.52	1.3	6.6	6	0.73	7.1	<0.5	220	<0.5
TFE-W													
W-292	07-JAN-09	E601	<0.5	0.82	<0.5	<0.5	0.99	2.8	1.6	1.4	<0.5	25	<0.5
W-305	07-JAN-09	E601	<0.5	1.2	<0.5	<0.5	3.5	<1	29	9.9	<0.5	42	0.99
TFG-1													
W-1111	12-JAN-09	E601	2.9	9.8	<0.5	<0.5	0.96	<1	<0.5	1.4	<0.5	4.3	<0.5
TFG-N^c													
W-1806 ^a	09-APR-08	E601	<0.5	2.4	<0.5	<0.5	<0.5	<1	<0.5	12	<0.5	2.4	<0.5
W-1807 ^a	10-APR-08	E601	<0.5	2	<0.5	<0.5	1.5	<1	1.5	16	<0.5	5.4	<0.5
TF406													
W-1309	13-JAN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.3	<0.5
W-1310	13-JAN-09	E601	<0.5	0.66	<0.5	<0.5	<0.5	<1	0.53	<0.5	<0.5	8.2	<0.5
GSW-445	26-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3	<0.5
TF406-NW^c													
W-1801 ^a	28-APR-08	E601	<0.5	2.3	<0.5	<0.5	<0.5	<1	5.4	0.74	<0.5	23	<0.5
TF518-N^c													
W-1410 ^a	23-JAN-08	E601	2.8	1.5	<0.5	<0.5	<0.5	<1	<0.5	0.83	<0.5	18	<0.5
TF518-PZ^d													
W-1615 ^a	07-FEB-08	E601	0.58	0.84	<0.5	<0.5	3	<1	<0.5	42	<0.5	130	<0.5
W-518-1913 ^a	07-FEB-08	E601	<0.5	<0.5	<0.5	<0.5	7.5	<1	<0.5	18	<0.5	34	<0.5
W-518-1914 ^a	07-FEB-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	20	<0.5	5.6	<0.5
W-518-1915 ^{ab}	07-FEB-08	E601	<25	<25	<25	<25	180	<50	<25	1500	<25	12000	<25
SVB-518-201 ^a	07-FEB-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	35	<0.5	8.5	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TF518-PZ (cont.)													
SVB-518-204 ^a	07-FEB-08	E601	<0.5	0.63	<0.5	<0.5	1.4	<1	<0.5	43	<0.5	550	<0.5
TF5475-1^c													
W-1302-2 ^a	18-JUL-07	E601	1.8	19	0.73	3.4	20	<1	7.4	41	<0.5	260	<0.5
TF5475-2^c													
W-1108 ^a	16-JAN-08	E601	2	39	0.79	3.1	18	<1	5.9	45	<0.5	440	<0.5
W-1415 ^a	16-JAN-08	E601	0.71	3.9	<0.5	<0.5	8.4	<1	2.1	9.8	<0.5	76	<0.5
TF5475-3^c													
W-1604 ^a	21-AUG-07	E601	2.9	29	0.94	5.2	23	<1	17	45	<0.5	390	<0.5
W-1605 ^a	21-AUG-07	E601	1.3	13	<0.5	5.7	7.2	1.2	4	21	<0.5	210	<0.5
W-1608 ^a	21-AUG-07	E601	<0.5	9.5	0.71	3.2	2.1	3.2	1.8	7.1	<0.5	69	<0.5
W-1609 ^a	21-AUG-07	E601	<0.5	13	0.55	9.4	2.7	<1	0.94	7.9	<0.5	62	<0.5

Notes on following page.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

^a Most recent VOC sample results available.

^b Elevated detection limit due to dilution.

^c Treatment Facility did not operate during reporting period. Please refer to Table A-1 for details.

^d No ground water was extracted from TF518-PZ wells during reporting period.

Notes:

CCl₄ = Carbon tetrachloride

CHCl₃ = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTFD-ETCS^a													
W-1904 ^b	26-JUN-07	TO15DI	<0.02	<0.02	<0.02	<0.02	0.12	<0.02	<0.02	2.2	<0.02	0.64	<0.02
W-ETC-2003 ^b	12-JUL-07	TO15DI	<0.008	<0.008	<0.008	<0.008	0.022	<0.008	<0.008	1.1	<0.008	0.26	<0.008
W-ETC-2004A ^b	12-JUL-07	TO15DI	<0.01	<0.01	<0.01	<0.01	0.021	<0.01	<0.01	1.6	<0.01	0.5	<0.01
W-ETC-2004B ^b	12-JUL-07	TO15DI	<0.02	<0.02	<0.02	<0.02	0.18	<0.02	<0.02	3.3	<0.02	1.7	<0.02
SIP-ETC-201 ^b	12-JUL-07	TO15DI	<0.01	<0.01	0.023	<0.01	0.054	<0.01	<0.01	1.6	<0.01	0.8	<0.01
VTFD-HPD^c													
W-1552 ^b	13-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	0.2	<0.005
W-1650 ^b	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1651 ^b	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1652 ^b	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1653 ^b	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1654 ^b	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1655 ^b	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1656 ^b	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1657 ^b	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-HPA-002B ^b	03-JUL-07	TO15DI	0.032	0.024	<0.0057	<0.0057	0.011	<0.0057	<0.0057	0.1	<0.0057	1	<0.0057
VTFD-HS^d													
W-653 ^b	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.093	<0.005
W-2011 ^b	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.081	<0.005
W-2101 ^b	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.061	<0.005
W-2102 ^b	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.11	<0.005
VTFE-ELM^e													
W-1903 ^b	16-AUG-07	TO15DI	<0.0084	<0.0084	<0.0084	<0.0084	1.4	<0.0084	0.36	1.4	<0.0084	1.5	<0.0084
W-1909 ^b	16-JUL-07	TO15DI	<0.008	<0.008	<0.008	<0.008	1.2	<0.008	0.36	0.04	<0.008	0.19	<0.008
W-2305 ^b	16-AUG-07	TO15DI	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	0.016	0.064	<0.005	0.069	<0.005
W-543-001 ^b	05-FEB-08	TO15DI	<0.005	<0.005	<0.005	<0.005	0.0096	<0.005	<0.005	0.13	<0.005	0.038	<0.005
W-543-003 ^b	05-FEB-08	TO15DI	<0.005	0.0069	<0.005	<0.005	0.052	<0.005	0.012	0.11	<0.005	0.29	<0.005
W-543-1908 ^b	05-FEB-08	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	<0.005	0.023	<0.005
VTFE-HS^f													
W-ETS-2008A ^b	30-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.031	<0.005	0.057	<0.005
W-ETS-2008B ^b	05-FEB-08	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	0.14	<0.005	0.4	<0.005
W-ETS-2009 ^b	30-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.062	<0.005	0.092	<0.005
W-ETS-2010A ^b	30-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.046	<0.005	0.096	<0.005
W-ETS-2010B ^b	30-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	0.021	0.0054	0.058	0.37	<0.005	1	<0.005
W-2105 ^b	30-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	0.01	0.022	<0.005	0.13	<0.005

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTF406-HS^g													
W-217	30-MAR-09	TO15DIT	0.42	0.031	0.016	<0.005	2.3	0.011	0.43	2.3	<0.005	1.9	0.011
W-514-2007A	30-MAR-09	TO15DIT	0.009	<0.005	<0.005	<0.005	0.016	<0.005	0.019	0.055	<0.005	0.38	0.22
W-514-2007B	30-MAR-09	TO15DIT	0.11	0.017	0.0099	<0.005	1.4	0.0068	0.11	1.2	<0.005	2.4	0.096
VTF511^h													
W-274 ^b	04-OCT-06	TO15DI	0.14	0.02	<0.0062	<0.0062	0.07	<0.0062	0.014	0.33	<0.0062	6.1	0.38
W-1517 ^b	20-DEC-07	TO15DI	0.0066	<0.005	<0.005	<0.005	0.0068	<0.005	<0.005	0.022	<0.005	0.65	0.016
W-2204 ^b	01-AUG-07	TO15DI	0.089	0.069	<0.02	0.091	0.039	<0.02	<0.02	0.26	<0.02	3.4	<0.02
W-2206 ^b	01-AUG-07	TO15DI	0.024	0.057	<0.02	0.25	<0.02	<0.02	<0.02	0.27	<0.02	2.9	<0.02
W-2207A ^b	26-FEB-08	TO15DI	<0.005	<0.005	<0.005	<0.005	0.0066	<0.005	<0.005	0.0064	<0.005	1.9	<0.005
W-2207B ^b	07-AUG-08	TO15DI	0.032	0.023	<0.0062	<0.0062	0.083	<0.0062	<0.0062	0.044	<0.0062	4.2	<0.0062
W-2208A ^b	26-FEB-08	TO15DI	0.18	0.047	<0.02	<0.02	0.37	<0.02	0.032	0.11	<0.02	15	0.75
W-2208B ^b	07-AUG-08	TO15DI	0.56	0.18	0.17	<0.072	3.6	0.11	0.19	1.8	<0.072	58	0.19
W-2205 ^b	01-AUG-07	TO15DI	0.087	0.14	<0.031	0.035	0.056	<0.031	<0.031	0.19	<0.031	5.5	<0.031
VTF518-PZⁱ													
W-1615 ^b	15-JAN-08	TO15DI	0.1	<0.025	<0.025	<0.025	0.96	<0.025	0.96	8.7	<0.025	17	<0.025
W-518-1913 ^b	15-JAN-08	TO15DI	0.012	0.006	0.007	<0.005	1.7	<0.005	0.063	2	<0.005	4.5	<0.005
W-518-1914 ^b	15-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.98	<0.005	0.28	<0.005
W-518-1915 ^b	15-JAN-08	TO15DI	<0.0066	<0.0066	<0.0066	<0.0066	0.29	<0.0066	0.01	1.6	<0.0066	5.9	<0.0066
SVB-518-201 ^b	15-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	<0.005	3.9	<0.005	0.34	<0.005
SVB-518-204 ^b	15-JAN-08	TO15DI	<0.02	<0.02	<0.02	<0.02	0.051	<0.02	<0.02	2.4	<0.02	15	<0.02
VTF5475^j													
W-ETS-507 ^b	06-SEP-07	TO15DI	<0.005	0.85	<0.005	0.62	<0.005	<0.005	<0.005	0.15	<0.005	0.67	<0.005
W-1605 ^b	06-SEP-07	TO15DI	0.0069	0.17	<0.005	0.15	0.11	<0.005	0.036	0.1	<0.005	0.85	<0.005
W-1608 ^b	06-SEP-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0061	<0.005
W-2211 ^b	12-OCT-07	TO15DI	<0.005	0.49	0.012	0.15	0.14	<0.005	0.01	0.11	<0.005	1.2	<0.005
W-2212 ^b	12-OCT-07	TO15DI	0.056	0.75	0.024	0.039	1.1	<0.005	0.16	0.66	<0.005	3.8	<0.005
W-2302 ^b	05-OCT-07	TO15DI	0.032	0.47	0.022	<0.017	0.73	<0.017	0.063	0.86	<0.017	11	<0.017
W-2303 ^b	05-OCT-07	TO15DI	0.009	0.88	0.038	0.083	0.4	<0.005	0.0088	0.36	<0.005	3.7	<0.005
SVI-ETS-504 ^b	12-OCT-07	TO15DI	<0.005	0.32	0.0052	0.14	0.073	<0.005	<0.005	0.064	<0.005	0.34	<0.005

Notes on following page.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

^a VTFD-ETCS did not operate during reporting period.

^b Most recent VOC vapor sample results available.

^c VTFD-HPD did not operate during reporting period.

^d VTFD-HS did not operate during reporting period.

^e VTFE-ELM did not operate during reporting period.

^f VTFE-HS did not operate during reporting period.

^g VTF406-HS did not operate during January and February. The facility was restarted in March.

^h VTF511 did not operate during reporting period.

ⁱ VTF518-PZ did not operate during reporting period.

^j VTF5475 did not operate during reporting period.

Notes:

CCl₄ = Carbon tetrachloride

CHCl₃ = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Chromium (total)^a mg/L (ppm)	Hexavalent Chromium mg/L (ppm)
TFA	TFA-I001	02-FEB-09	0.012	0.012
	TFA-E001	02-FEB-09	0.012	0.012
TFA-E	W-254	07-JAN-09	0.005	NA
	STU06-E	07-JAN-09	<0.005	<0.005
TFA-W	TFA-W-E	14-JAN-09	0.019	NA
TFB	TFB-I002	06-JAN-09	0.033	NA
	TFB-E002	06-JAN-09	0.017	0.013
	TFB-E002	03-FEB-09	0.016	NA
	TFB-E002	03-MAR-09	0.016	NA
	TFB-R002	06-JAN-09	0.015	NA
TFC	TFC-I003	08-JAN-09	0.026	NA
	TFC-E003	08-JAN-09	0.013	0.016
	TFC-E003	03-FEB-09	0.015	NA
	TFC-E003	03-MAR-09	0.015	NA
	TFC-R003	08-JAN-09	0.0098	NA
TFC-E	MTU1-I	19-MAR-09	0.033	0.024
	MTU1-E	19-FEB-09	0.013	NA
	MTU1-E	02-MAR-09	0.013	NA
TFC-SE	PTU1-I	18-MAR-09	0.036	NA
	PTU1-E	08-JAN-09	0.0086	NA
	PTU1-E	17-FEB-09	0.0056	NA
	PTU1-E	18-MAR-09	<0.005	NA
TFD-E	PTU8-I	12-JAN-09	0.0065	NA
	PTU8-E	12-JAN-09	<0.005	0.0065
TFD-S	PTU2-I	29-JAN-09	0.011	NA
	PTU2-E	29-JAN-09	0.01	0.0099
TFD-SE	PTU11-I	12-JAN-09	0.016	NA
	PTU11-E	12-JAN-09	0.013	0.016
TFD-SS	PTU12-I	13-JAN-09	0.012	NA
	PTU12-E	13-JAN-09	0.01	0.012
TFD-W	PTU6-I	14-JAN-09	0.01	NA
	PTU6-E	14-JAN-09	0.0077	0.011
TFE-HS	GTU07-I	12-FEB-09	0.0084	NA
	GTU07-E	12-FEB-09	<0.005	<0.005
TFE-NW	PTU9-I	12-JAN-09	0.011	NA
	PTU9-E	12-JAN-09	0.0082	0.011
TFE-SW	MTU03-I	08-JAN-09	0.002	NA
	MTU03-E	08-JAN-09	<0.005	0.006
TFE-W	MTU05-I	07-JAN-09	0.011	NA
	MTU05-E	07-JAN-09	0.0093	0.01
TFG-1	GTU01-I	12-JAN-09	0.0078	NA

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Chromium (total)^a mg/L (ppm)	Hexavalent Chromium mg/L (ppm)
TFG-1 (cont.)	GTU01-E	12-JAN-09	<0.005	<0.005
	TFG-ASW	18-MAR-09	0.013	NA
TF406	PTU5-I	13-JAN-09	0.012	NA
	PTU5-E	13-JAN-09	0.011	0.012

^aA discharge limit of 0.050 ppm is set for total chromium during the dry season (April 1-November 30), and no limit is set for total chromium for the wet season (December 1-March 31); however, a limit of 0.022 ppm hexavalent chromium applies during the wet season. Discharge limits are defined in the Explanation of Significant Differences for metals discharge limits (April 1997).

Shaded values exceeded the discharge limit. See text for explanation.

Table A-5. Bioassay, turbidity, and chloride analyses of influent and effluent samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Aquatic Bioassay^a Percent Survival	Turbidity Nephelometric Turbidity Units (NTU)	Chloride (mg/L)
TFA	TFA-I001	02-FEB-09	NA	NA	79
TFA	TFA-E001	02-FEB-09	100 (100)	0.1	80
TFA-E	STU06-E	07-JAN-09	100 (100)	<0.1	36
TFB	TFB-E002	06-JAN-09	100 (100)	<0.1	79
TFC	TFC-E003	08-JAN-09	100 (100)	0.19	130
TFC-SE	PTU1-E	18-MAR-09	100 (100)	0.1	77
TFD-E	PTU8-E	12-JAN-09	100 (100)	<0.1	310
TFD-S	PTU2-E	29-JAN-09	100 (100)	<0.1	72
TFD-SE	PTU11-E	12-JAN-09	100 (100)	<0.1	89
TFD-SS	PTU12-E	13-JAN-09	100 (100)	0.1	160
TFD-W	PTU6-E	14-JAN-09	100 (100)	0.1	210
TFE-HS	GTU07-E	12-FEB-09	100 (100)	<0.1	44
TFE-NW	PTU9-E	12-JAN-09	100 (100)	<0.1	110
TFE-SW	MTU03-E	08-JAN-09	100 (100)	0.25	53
TFE-W	MTU05-E	07-JAN-09	100 (100)	0.1	59
TFG-1	GTU01-E	12-JAN-09	100 (100)	<0.1	40
TF406	PTU5-E	13-JAN-09	100 (100)	0.26	65

^aTest species was Fathead minnow and the test duration was 96 hours.

Percent survival in the control group samples shown in parentheses.

Note: NA = not applicable

Table A-6. Metals analyses of influent and effluent samples by treatment facility as compared to the instantaneous Maximum.

		Antimony	Arsenic	Beryllium	Boron	Cadmium	Copper	Cyanide	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
		<-	-	-	-	-	-	mg/L (ppm)	-	-	-	-	-	-	-	-	->
Wet Season^a		NA	0.01	NA	NA	0.002	0.0236	NA	NA	0.006	NA	0.002	0.3	0.01	0.1	NA	0.220
(December 1 - March 31)																	
Sample Station	Date Sampled																
TFA																	
TFA-I001	02-FEB-09	<0.005	<0.005	<0.0002	0.67	<0.001	<0.005	NA	<0.05	<0.005	<0.01	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFA-E001	02-FEB-09	<0.005	<0.005	<0.0002	0.67	<0.001	<0.005	NA	<0.05	<0.005	<0.01	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFA-E																	
STU06-E	07-JAN-09	<0.005	<0.005	<0.005	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFA-W																	
TFA-W-E	14-JAN-09	NA	<0.002	NA	NA	<0.005	<0.01	NA	NA	<0.002	NA	<0.0002	<0.005	NA	<0.01	NA	<0.05
TFB																	
TFB-E002	06-JAN-09	<0.005	<0.005	<0.005	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFC																	
TFC-E003	08-JAN-09	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFC-SE																	
PTU1-E	18-MAR-09	<0.005	<0.005	<0.005	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-E																	
PTU8-E	12-JAN-09	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-S																	
PTU2-E	29-JAN-09	<0.005	<0.005	<0.005	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-SE																	
PTU11-E	12-JAN-09	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-SS																	
PTU12-E	13-JAN-09	<0.005	<0.005	<0.005	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-W																	
PTU6-E	14-JAN-09	<0.005	<0.005	<0.005	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-HS																	
GTU07-E	12-FEB-09	<0.005	<0.005	<0.005	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-NW																	
PTU9-E	12-JAN-09	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-SW																	
MTU03-E	08-JAN-09	<0.005	<0.005	<0.001	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-W																	
MTU05-E	07-JAN-09	<0.005	<0.005	<0.005	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01

Table A-6. Metals analyses of influent and effluent samples by treatment facility as compared to the instantaneous Maximum.

		Antimony	Arsenic	Beryllium	Boron	Cadmium	Copper	Cyanide	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
		<-	-	-	-	-	-	mg/L (ppm)	-	-	-	-	-	-	-	-	->
Wet Season ^a (December 1 - March 31)		NA	0.01	NA	NA	0.002	0.0236	NA	NA	0.006	NA	0.002	0.3	0.01	0.1	NA	0.220
Sample Station	Date Sampled																
TFG-1																	
GTU01-E	12-JAN-09	<0.005	<0.005	<0.005	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TF406																	
PTU5-E	13-JAN-09	<0.005	<0.005	<0.005	NA	<0.001	<0.005	NA	NA	<0.005	NA	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01

^aThe Explanation of Significant Differences for metals discharge identifies the Instantaneous Maximum concentrations for the wet season (December 1 - March 30).

NA = not applicable

Numbers in **BOLD** print indicate positive values above the detection limit.

Shaded values exceeded the discharge limit. See text for explanation.

Table A-7. Radiological analyses of effluent and receiving waters by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Gross Alpha <-	Gross Beta pCi/L	Tritium ->
TFA	TFA-E001	02-FEB-09	3.73	4.03	120
TFA-E	STU06-E	07-JAN-09	<2	<3	199
TFB	TFB-E002	06-JAN-09	3.48	3.01	181
TFB	TFB-R002	06-JAN-09	<2	<3	165
TFC	TFC-E003	08-JAN-09	<2	<3	249
TFC	TFC-R003	08-JAN-09	3.79	<3	193
TFD-E	PTU8-E	12-JAN-09	5.32	4.12	204
TFD-S	PTU2-E	29-JAN-09	2.44	<3	159
TFD-SE	PTU11-E	12-JAN-09	3.28	<3	402
TFD-SS	PTU12-E	13-JAN-09	<2	<3	175
TFD-W	PTU6-E	14-JAN-09	6.4	3.53	<100
TFE-HS	GTU07-E	12-FEB-09	<2	<3	109
TFE-NW	PTU9-E	12-JAN-09	3.39	<3	192
TFE-SW	MTU03-I	08-JAN-09	NA	NA	3940
TFE-SW	MTU03-E	08-JAN-09	<2	<3	3900
TFE-W	MTU05-E	07-JAN-09	3.3	<3	235
TFG-1	GTU01-E	12-JAN-09	2.71	4.78	186
TF406	PTU5-E	13-JAN-09	<2	<3	<100

Numbers in **BOLD** print indicate positive values above the detection limit.

Explanation of Abbreviations

TFA-I001 is a sampling port located immediately prior to the TFA Treatment System.

TFA-E001 is a sampling port located immediately after the TFA Treatment System, at the beginning of the discharge pipeline.

TFA receiving water is routinely sampled at the TFG-ASW location.

TFA-W-I is an influent sampling port prior to the sediment bag filter immediately following W-404.

TFA-W-E is an effluent sampling port immediately following the sediment bag filter; the water is then discharged to the Livermore Water Reclamation Plant (LWRP).

TFB-I002 is a sampling port located immediately prior to the TFB Treatment System.

TFB-E002 is a sampling port located immediately after the TFB Treatment System, at the beginning of the discharge pipeline.

TFB-R002 is a sampling station in the drainage ditch north of TFB, located approximately 75 ft downstream from the discharge point.

TFC-I003 is a sampling port located immediately prior to the TFC Treatment System.

TFC-E003 is a sampling port located immediately after the TFC Treatment System, at the beginning of the discharge pipeline.

TFC-R003 is a sampling station in Arroyo Las Positas, located approximately 75 ft downstream from the TFC discharge point.

TFD-I004 is a sampling port located immediately prior to the TFD Treatment System.

TFD-E004 is a sampling port located immediately after the TFD Treatment System, prior to discharge to the Drainage Retention Basin or to the underground discharge pipeline leading to Arroyo Las Positas.

TFD-R004 is now combined with and collected at the TFC-R003 location. Results are reported under TFC-R003, as approved by the RWQCB.

CRD1-I is a sampling port located immediately prior to the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1).

CRD1-E is the effluent from the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1) and then reinjected at W-1302.

CRD2-I is a sampling port located immediately prior to the catalytic columns in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2).

CRD2-E is the effluent from the last catalytic column in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2) and then reinjected at W-1610.

GTU01-I is a sampling port located immediately prior to GTU01, which is currently operating in the TFG-1 area.

GTU01-E is a sampling port located immediately after GTU01, which is currently operating in the TFG-1 area.

GTU01 receiving water is routinely sampled at the TFG-ASW location.

GTU03-I is a sampling port located immediately prior to GTU03, which is currently operating in the TF406 Northwest area.

GTU03-E is a sampling port located immediately after GTU03, which is currently operating in the TF406 Northwest area.

GTU03 receiving water is routinely sampled at the TFC-R003 location.

GTU07-I is a sampling port located immediately prior to GTU07, which is currently operating in the TFE Hotspot area.

GTU07-E is a sampling port located immediately after GTU07, which is currently operating in the TFE Hotspot area.

GTU07 receiving water is routinely sampled at the TFC-R003 location.

GTU09-I is a sampling port located immediately prior to GTU09, which is currently operating in the TF5475 area.

GTU09-E is a sampling port located immediately after GTU09, which is currently operating in the TF5475 area.

GTU09 receiving water is routinely sampled at the TFC-R003 location.

MTU02-I is a sampling port located immediately prior to MTU02, which is currently operating in the TFG North area.

MTU02-E is a sampling port located immediately after MTU02, which is currently operating in the TFG North area.

MTU02 receiving water is routinely sampled at the TFC-R003 location.

MTU03-I is a sampling port located immediately prior to MTU03, which is currently operating in the TFE Southwest area.

MTU03-E is a sampling port located immediately after MTU03, which is currently operating in the TFE Southwest area.

MTU03 receiving water is routinely sampled at the TFC-R003 location.

MTU04-I is a sampling port located immediately prior to MTU04, which is currently operating in the TFE Southeast area.

MTU04-E is a sampling port located immediately after MTU04, which is currently operating in the TFE Southeast area.

MTU04 receiving water is routinely sampled at the TFC-R003 location.

MTU05-I is a sampling port located immediately prior to MTU05, which is currently operating in the TFE West area.

MTU05-E is a sampling port located immediately after MTU05, which is currently operating in the TFE West area.

MTU05 receiving water is routinely sampled at the TFC-R003 location.

Explanation of Abbreviations

MTU1-I is a sampling port located immediately prior to MTU1, which is currently operating in the TFC East area.

MTU1-E is a sampling port located immediately after MTU1, which is currently operating in the TFC East area.

MTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU1-I is a sampling port located immediately prior to PTU-1, which is currently operating in the TFC Southeast area.

PTU1-E is a sampling port located immediately after PTU-1, which is currently operating in the TFC Southeast area.

PTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU2-I is a sampling port located immediately prior to PTU-2, which is currently operating in the TFD South area.

PTU2-E is a sampling port located immediately after PTU-2, which is currently operating in the TFD South area.

PTU2 receiving water is routinely sampled at TFC-R003 during the wet season.

PTU3-I is a sampling port located immediately prior to PTU-3, which is currently operating in the TFE East area.

PTU3-E is a sampling port located immediately after PTU-3, which is currently operating in the TFE East area.

PTU3 receiving water is routinely sampled at the TFC-R003 location.

PTU5-I is a sampling port located immediately prior to PTU-5, which is currently operating in the TF406 extraction location.

PTU5-E is a sampling port located immediately after PTU-5, which is currently operating in the TF406 extraction location.

PTU5 receiving water is routinely sampled at the TFC-R003 location.

PTU6-I is a sampling port located immediately prior to PTU-6, which is currently operating in the TFD West area.

PTU6-E is a sampling port located immediately after PTU-6, which is currently operating in the TFD West area.

PTU6 receiving water is routinely sampled at the TFC-R003 location.

PTU8-I is a sampling port located immediately prior to PTU-8, which is currently operating in the TFD East area.

PTU8-E is a sampling port located immediately after PTU-8, which is currently operating in the TFD East area.

PTU8 receiving water is routinely sampled at the TFC-R003 location.

PTU9-I is a sampling port located immediately prior to PTU-9, which is currently operating in the TFE Northwest area.

PTU9-E is a sampling port located immediately after PTU-9, which is currently operating in the TFE Northwest area.

PTU9 receiving water is routinely sampled at the TFC-R003 location.

PTU10-I is a sampling port located immediately prior to PTU-10, which is currently operating in the TFD Helipad area.

PTU10-E is a sampling port located immediately after PTU-10, which is currently operating in the TFD Helipad area.

PTU10 receiving water is routinely sampled at the TFC-R003 location.

PTU11-I is a sampling port located immediately prior to PTU-11, which is currently operating in the TFD Southeast area.

PTU11-E is a sampling port located immediately after PTU-11, which is currently operating in the TFD Southeast area.

PTU11 receiving water is routinely sampled at the TFC-R003 location.

PTU12-I is a sampling port located immediately prior to PTU-12, which is currently operating in the TFD Southshore area.

PTU12-E is a sampling port located immediately after PTU-12, which is currently operating in the TFD Southshore area.

PTU12 receiving water is routinely sampled at the TFC-R003 location.

STU06-I is a sampling port located immediately prior to STU06, which is operating in the TFA East area.

STU06-E is a sampling port located immediately after STU06, which is operating in the TFA East area.

STU06 receiving water is routinely sampled at the TFG-ASW location.

STU09-I is a sampling port located immediately prior to STU09, which is currently operating in the TF518-North area.

STU09-E is a sampling port located immediately after STU09, which is currently operating in the TF518-North area.

STU09 receiving water is routinely sampled at the TFC-R003 location.

Addendum to Attachment A

Treatment Facility Monitor and Extraction Well Data

Addendum. VOC analyses for nearby monitor wells and extraction wells associated with treatment facilities restarted during the 1st quarter of 2009.

Sample Station	Date Sampled	Analytic Method ^a	CCI4 <-	CHCl3 -	1,1-DCA -	1,2-DCA -	1,1-DCE -	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFA													
Extraction Wells^b													
W-109	24-Apr-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.51	2	<0.5	<0.5	<0.5
W-109	14-Jan-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	2.1	<0.5	<0.5	<0.5
W-408	24-Apr-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.78	<0.5	<0.5	<0.5
W-408	14-Jan-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.8	<0.5	<0.5	<0.5
W-415	24-Apr-08	E601	<0.5	1.2	0.84	<0.5	1.8	<1	<0.5	14	<0.5	1.2	<0.5
W-415	14-Jan-09	E601	<0.5	1.5	<0.5	<0.5	<0.5	<1	<0.5	38	<0.5	1.3	<0.5
W-614	24-Apr-08	E601	<0.5	0.84	<0.5	<0.5	<0.5	<1	<0.5	8.2	<0.5	<0.5	<0.5
W-614	14-Jan-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	6.1	<0.5	<0.5	<0.5
W-712	24-Apr-08	E601	3.2	3	1.2	<0.5	3.7	<1	<0.5	1.6	<0.5	3.6	<0.5
W-712	14-Jan-09	E601	4	3.9	1.2	<0.5	3.4	<1	<0.5	2.1	<0.5	4.8	<0.5
W-714	6-May-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	8.4	<0.5	<0.5	<0.5
W-714	14-Jan-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	7.8	<0.5	<0.5	<0.5
W-1001	24-Apr-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-1001	14-Jan-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.73	<0.5	<0.5	<0.5
W-1009	24-Apr-08	E601	1.4	5.9	0.94	<0.5	4	<1	0.71	13	<0.5	2.3	<0.5
W-1009	14-Jan-09	E601	0.82	3.5	0.93	<0.5	2.7	<1	<0.5	24	<0.5	2.2	<0.5
TFC-SE													
Extraction Wells^b													
W-1213	8-Apr-08	E601	<0.5	4.4	<0.5	<0.5	2.7	<1	6.4	<0.5	<0.5	15	<0.5
W-1213	8-Jan-09	E601	<0.5	9.4	<0.5	<0.5	1.4	<1	6.7	<0.5	<0.5	10	0.54
W-1213	17-Feb-09	E601	<0.5	7.9	<0.5	<0.5	4.1	<1	7.2	<0.5	<0.5	26	0.5
W-1213	18-Mar-09	E601	<0.5	8.5	<0.5	<0.5	4.5	<1	7.8	<0.5	<0.5	29	0.53
W-2201	8-Apr-08	E601	<0.5	9.5	<0.5	<0.5	2.4	<1	15	0.69	<0.5	19	1.2
W-2201	8-Jan-09	E601	<0.5	9.6	<0.5	<0.5	1.1	<1	17	0.66	<0.5	15	1.7
W-2201	18-Mar-09	E601	<0.5	9.2	<0.5	<0.5	1.8	<1	21	0.85	<0.5	21	1.6
TFE-HS													
Extraction Wells^b													
W-2012	9-Apr-08	E601	1.9	1.8	<0.5	<0.5	9	2.9	7.9	15	<0.5	260	<0.5
W-2012	27-Jan-09	E601	<0.5	0.81	<0.5	<0.5	6.1	<1	23	43	<0.5	360	<0.5

Addendum. VOC analyses for nearby monitor wells and extraction wells associated with treatment facilities restarted during the 1st quarter of 2009.

Sample Station	Date Sampled	Analytic Method ^a	CCl4 <-	CHCl3 -	1,1-DCA -	1,2-DCA -	1,1-DCE -	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-HS (cont.)													
W-2012	19-Mar-09	E601	1.6	2.2	<0.5	<0.5	9	2.6	8.7	15	<0.5	260	<0.5
W-2105	9-Apr-08	E601	<0.5	1.4	<0.5	<0.5	3.2	1.4	4.4	14	<0.5	440	<0.5
W-2105	27-Jan-09	E601	<0.5	0.62	<0.5	<0.5	<0.5	2.3	1.2	7.8	<0.5	210	<0.5
VTF406-HS													
Extraction Wells^b													
W-217	26-Jun-08	TO15DIT	0.33	0.37	0.015	<0.005	2	0.013	0.38	2.9	<0.005	2.8	<0.005
W-217	19-Feb-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.0051	0.0067	<0.005	0.033	<0.005	0.03	<0.005
W-217	17-Mar-09	TO15DIT	0.76	0.024	0.011	<0.005	1.8	0.01	0.7	1.9	<0.005	1.3	0.014
W-217	30-Mar-09	TO15DIT	0.42	0.031	0.016	<0.005	2.3	0.011	0.43	2.3	<0.005	1.9	0.011
W-514-2007A	26-Jun-08	TO15DIT	0.018	<0.005	<0.005	<0.005	0.012	<0.005	0.01	0.066	<0.005	0.37	0.19
W-514-2007A	19-Feb-09	TO15DIT	0.027	<0.018	<0.018	<0.018	0.07	<0.018	0.035	0.45	<0.018	0.39	0.14
W-514-2007A	18-Mar-09	TO15DIT	0.025	<0.005	<0.005	<0.005	0.038	<0.005	0.055	0.063	<0.005	0.44	0.54
W-514-2007A	30-Mar-09	TO15DIT	0.009	<0.005	<0.005	<0.005	0.016	<0.005	0.019	0.055	<0.005	0.38	0.22
W-514-2007B	26-Jun-08	TO15DIT	0.11	0.018	0.0096	<0.005	1	0.01	0.082	1.4	<0.005	2.7	0.016
W-514-2007B	19-Feb-09	TO15DIT	0.19	0.01	0.0051	<0.005	0.6	<0.005	0.24	0.86	<0.005	0.88	0.029
W-514-2007B	19-Mar-09	TO15DIT	0.18	0.014	0.0084	<0.005	1.5	<0.005	0.22	0.98	<0.005	2.1	0.063
W-514-2007B	30-Mar-09	TO15DIT	0.11	0.017	0.0099	<0.005	1.4	0.0068	0.11	1.2	<0.005	2.4	0.096
Monitor Wells^c													
SIP-514-119	19-Feb-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.0092	<0.005	0.012	0.077	<0.005	0.047	0.011
SIP-514-123	19-Feb-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	0.0087	<0.005
SIP-514-124	19-Feb-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	0.022	0.16	0.0066	0.14	0.022
SIP-514-125	19-Feb-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.03	<0.005	0.018	<0.005
SIP-514-126	19-Feb-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.01	0.094	0.021	0.87	0.02	0.38	<0.005

Notes on the following page.

Addendum. VOC analyses for nearby monitor wells and extraction wells associated with treatment facilities restarted during the 1st quarter of 2009.

^a EPA Method 601 and TO15DIT analytical methods were used to determine VOCs in ground water (ppb) and soil vapor (ppm [v/v]), respectively.

^b Extraction well analytical results.

^c Monitor well analytical results.

Notes:

CCl_4 = Carbon tetrachloride

CHCl_3 = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Attachment B

Self-Monitoring Reports

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	<u>14</u>	15
	16	17	18	19	20	<u>21</u>	<u>22</u>	<u>23</u>	24	25	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 51

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-14-2009</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.6</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-408	6,700	13.0
W-109	88,200	29.0
W-457	21,100	9.0
W-522	0	0.0
W-614	27,600	12.0
W-712	12,600	7.0
W-714	20,100	7.0
W-904	0	0.0
W-415	700	35.0
W-518	0	0.0
W-903	0	0.0
W-605	24,800	9.0
W-262	0	0.0
W-1004	15,800	12.0
W-1009	62,000	23.0
W-1001	200	3.5
Total:	<u>279,800</u>	<u>159.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>139,900</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

139,900

6. Comments:

Initial well sampling on 1-14-09. Manned operation (business days only) began on 1-21-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____

Steve Kawaguchi

Date: 02-02-2009

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31																
February	01	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	07	08	<u>09</u>	<u>10</u>	<u>11</u>	12	<u>13</u>	14	15		
	16	<u>17</u>	<u>18</u>	<u>19</u>	20	21	22	<u>23</u>	<u>24</u>	<u>25</u>	26	<u>27</u>					

Total monthly time facility operated (hours): 108

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-02-2009</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.1</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-408	0	0.0
W-109	221,200	34.7
W-457	48,100	10.0
W-522	0	0.0
W-614	62,800	9.9
W-712	55,100	8.5
W-714	47,400	7.7
W-904	0	0.0
W-415	36,400	40.0
W-518	0	0.0
W-903	0	0.0
W-605	57,000	9.0
W-262	0	0.0
W-1004	71,300	10.8
W-1009	150,000	23.0
W-1001	3,100	4.0
<hr/>		
Total:	<u>752,400</u>	<u>157.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>376,200</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

376,200

6. Comments:

Facility operating during business hours only. Down intermittently for maintenance. Started W-1001 and W-415 on 2-24-09. 24-hour operation began on 2-27-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-22-2009

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

3,135,700

6. Comments:

Facility secured on 3-4-09 for well recovery. Step flow start up began on 3-11-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____

Steve Kauragan

Date: 05-22-2009

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 191

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-07-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 16.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	34,494	2.9
Total:	<u>34,494</u>	<u>2.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>34,494</u>

6. Comments:

Facility strategy software being modified during entire month to allow continuous operation.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____

Date: 01-30-2009

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>31</u>																		
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>							

Total monthly time facility operated (hours): 276

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-03-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.6</u>

4. Wellfield Data:

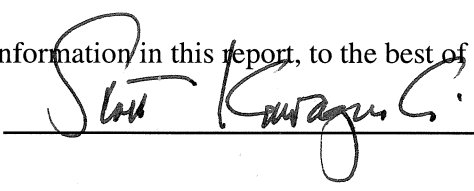
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	47,553	2.9
Total:	<u>47,553</u>	<u>2.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>47,553</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2009

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 347

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-10-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 19.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	59,888	2.9
Total:	<u>59,888</u>	<u>2.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>59,888</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Karaguzis Date: 03-31-2009

Self-Monitoring Report
LLNL Treatment Facility B (TFB)
AREA TFB

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-06-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 17.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	219,400	5.6
W-621	292,200	7.2
W-620	0	0.0
W-610	222,200	5.4
W-704	623,600	6.1
W-655	301,900	7.9
W-1423	277,000	6.1
Total:	<u>1,936,300</u>	<u>38.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>1,936,300</u>

6. Comments:

W-704 flow rate increased from 6 gpm to 18 gpm on 1-6-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-30-2009

Self-Monitoring Report
LLNL Treatment Facility B (TFB)
AREA TFB

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 639

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-03-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 20

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	227,200	6.0
W-621	289,700	7.4
W-620	0	0.0
W-610	237,500	5.9
W-704	704,700	17.9
W-655	270,700	7.2
W-1423	258,500	6.3
Total:	<u>1,988,300</u>	<u>50.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>1,988,300</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Shirley K. Kavanagh Date: 03-01-2009

Self-Monitoring Report
LLNL Treatment Facility B (TFB)
AREA TFB

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 776

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-03-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 16.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	266,800	5.8
W-621	334,900	7.3
W-620	0	0.0
W-610	324,300	6.1
W-704	819,000	17.8
W-655	306,900	6.7
W-1423	297,700	7.2
Total:	<u>2,349,600</u>	<u>50.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>2,349,600</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Shirley Karaga Ci Date: 03-31-2009

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month January Year 2009

2. Date compliance sampling performed 01-06-2009

3. Weather Conditions:

Average air tempertaure (°C):

6

6-day total precipitation (in):

.11

Average wind speed/direction (mph):

3/ SE

4. Receiving Data:

Sample

Location

pH

Temperature (C)

Receiving Water

7.5

16.4

5. Land Observations, as "Yes" or "No", for reporting month:

Visual Observations

Effluent

Receiving Water

Floating and Suspended Materials of Waste Origin

No

No

Odor

No

No

Discoloration and Turbidity

Not Required

No

Evidence of Beneficial Water Use

Not Required

No

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Karaguzi

Date: 01-30-2009

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month February Year 2009

2. Date compliance sampling performed 02-03-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>10.5</u>
6-day total precipitation (in):	<u>0</u>
Average wind speed/direction (mph):	<u>3/ ESE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Karaguzi Date: 03-01-2009

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month March Year 2009

2. Date compliance sampling performed 03-03-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>11.6</u>
6-day total precipitation (in):	<u>1.62</u>
Average wind speed/direction (mph):	<u>5/ SSE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Karaguzi Date: 03-31-2009

Self-Monitoring Report
LLNL Treatment Facility C (TFC)
AREA TFC

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **718**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **01-08-2009**
Influent pH: **7.5**
Effluent pH: **8.0**
Effluent Temperature (°C): **17.8**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	540,117	12.7
W-1015	276,524	6.5
W-1116	82,913	2.0
W-1103	129,793	2.8
W-1102	132,013	4.0
W-1104	1,180,723	27.6
Total:	<u>2,342,083</u>	<u>55.6</u>

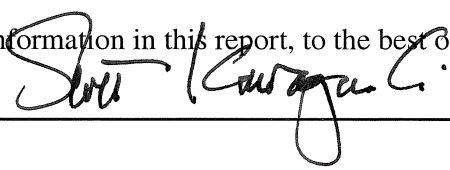
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,342,083</u>

6. Comments:

Lead ion exchange column removed from service and replaced with lag ion exchange column. New ion exchange column placed in lag position on 1-26-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **01-30-2009**

Self-Monitoring Report
LLNL Treatment Facility C (TFC)
AREA TFC

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 642

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-03-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 18.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	479,691	11.9
W-1015	256,048	6.2
W-1116	66,245	1.8
W-1103	121,958	3.0
W-1102	122,837	4.1
W-1104	1,049,301	26.6
Total:	<u>2,096,080</u>	<u>53.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,096,080</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaga Date: 03-01-2009

Self-Monitoring Report
LLNL Treatment Facility C (TFC)
AREA TFC

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 718

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-03-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 18.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	571,740	13.4
W-1015	215,814	7.6
W-1116	68,771	1.6
W-1103	146,179	3.4
W-1102	94,827	3.9
W-1104	1,197,867	27.7
Total:	<u>2,295,198</u>	<u>57.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,295,198</u>

6. Comments:

Facility went down on 3-15-09 due to suspected power surge. Restarted on 3-17-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 03-31-2009

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month January Year 2009

2. Date compliance sampling performed 01-08-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>5.7</u>
6-day total precipitation (in):	<u>.05</u>
Average wind speed/direction (mph):	<u>3/ ESE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>7.0</u>	<u>11.5</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Shirley Karaguzi Date: 01-30-2009

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month February Year 2009

2. Date compliance sampling performed 02-03-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>10.5</u>
6-day total precipitation (in):	<u>0</u>
Average wind speed/direction (mph):	<u>3/ ESE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2009

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month March Year 2009

2. Date compliance sampling performed 03-03-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>11.6</u>
6-day total precipitation (in):	<u>1.62</u>
Average wind speed/direction (mph):	<u>5/ SSE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Karaguzi Date: 03-31-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-413	0	0.0
W-368	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-27-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-03-2009**

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	<u>19</u>	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 1

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-19-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>13.8</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-413	212	16.0
W-368	121	4.0
Total:	<u>333</u>	<u>20.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>333</u>

6. Comments:

REVAL initial sampling was completed on 2-19-09 and facility was secured.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-03-2009**

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February	28																		
March	01	<u>02</u>	03	04	05	06	07	08	<u>09</u>	10	11	12	13	14	15				
	<u>16</u>	17	18	<u>19</u>	20	21	22	23	24	<u>25</u>	<u>26</u>	<u>27</u>	28	29	<u>30</u>	<u>31</u>			

Total monthly time facility operated (hours): 42

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-02-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>6.5</u>
Effluent Temperature (°C):	<u>16.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-413	41,377	16.0
W-368	6,321	4.0
Total:	<u>47,698</u>	<u>20.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>47,698</u>

6. Comments:

Facility started out operating one day a week. We started operating day time operations only on 3-25-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-31-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	<u>08</u>	<u>09</u>	10	11	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	17	18	19	<u>20</u>	<u>21</u>	<u>22</u>	23	24	25	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 86

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-08-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	24,034	4.5
W-2201	38,475	7.6
Total:	<u>62,509</u>	<u>12.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>62,509</u>

6. Comments:

Manned operation on business days only started on 1-8-09. System secured on 1-30-09 for recovery.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **01-30-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31																		
February	01	02	03	04	05	06	07	08	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	24	25	26	27							

Total monthly time facility operated (hours): 343

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-17-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	125,695	7.5
W-2201	2,330	0.0
Total:	<u>128,025</u>	<u>7.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>128,025</u>

6. Comments:

System started in 24 hour operation mode on 2-9-09 for a W-1213 step-drawdown hydraulic test (W-2201 remained off during test). System secured on 2-23-09 for well recovery.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 03-03-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 606

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-18-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	188,957	5.2
W-2201	337,800	7.2
Total:	<u>526,757</u>	<u>12.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>526,757</u>

6. Comments:

Extraction wells step flow process occurred through 3-23-09 at which time well flow rates were adjusted to normal operating flow rates. Facility was down from 2-23-09 through 3-1-09 and from 3-10-09 through 3-11-09 for well recovery.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Caragui Date: 04-01-2009

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-653	0	0.0
W-351	0	0.0
W-907-2	0	0.0
W-906	0	0.0
W-1206	0	0.0
W-1208	0	0.0
W-2102	0	0.0
W-2011	0	0.0
W-2101	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 7-25-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility D (TFD)
AREA TFD

Operator Signature: Steve Keragen C. Date: 02-03-2009

Self-Monitoring Report

LLNL Treatment Facility D (TFD)

AREA TFD

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-653	0	0.0
W-351	0	0.0
W-907-2	0	0.0
W-906	0	0.0
W-1206	0	0.0
W-1208	0	0.0
W-2102	0	0.0
W-2011	0	0.0
W-2101	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 7-25-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility D (TFD)
AREA TFD

Operator Signature: _____

Scott Kawaguchi

Date: 03-01-2009

Operator Signature: [Signature] Date: 03-31-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 728

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-12-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1255	0	0.0
W-1253	0	0.0
W-1307	274,200	6.4
W-1303	0	0.0
W-1306	11,800	0.3
W-1404	18,100	0.0
W-1550	132,300	2.4
W-1301	59,900	1.3
W-2006	600	0.0
W-2203	31,500	1.0
Total:	<u>528,400</u>	<u>11.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>528,400</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kowalski Date: 01-30-2009

Self-Monitoring Report

LLNL Portable Treatment Unit 8 (PTU8)

AREA TFD-E

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 633

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-04-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1255	0	0.0
W-1253	0	0.0
W-1307	237,500	6.4
W-1303	0	0.0
W-1306	7,400	0.3
W-1404	59,600	1.4
W-1550	87,800	2.4
W-1301	52,100	1.3
W-2006	0	0.0
W-2203	41,600	1.1
Total:	<u>486,000</u>	<u>12.9</u>

5. Discharge Information:

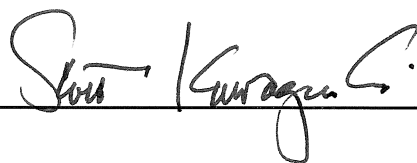
<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>486,000</u>

6. Comments:

System went down on 2-15-09 due to low flow alarm. System restarted on 2-17-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

Operator Signature:  Date: 03-01-2009

Self-Monitoring Report (cont'd)
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

Operator Signature: Stu / Caragual Date: 03-31-2009

Self-Monitoring Report

LLNL Portable Treatment Unit 10 (PTU10)

AREA TFD-HPD

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	0	0.0
W-1653	0	0.0
W-1657	0	0.0
W-1551	0	0.0
W-1654	0	0.0
W-1656	0	0.0
W-1650	0	0.0
W-1652	0	0.0
W-1552	0	0.0
W-1651	0	0.0
W-1655	0	0.0
<hr style="border: 0.5px solid black;"/>		
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation pilot test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

Self-Monitoring Report (cont'd)
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2009

Self-Monitoring Report

LLNL Portable Treatment Unit 10 (PTU10)

AREA TFD-HPD

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	0	0.0
W-1653	0	0.0
W-1657	0	0.0
W-1551	0	0.0
W-1654	0	0.0
W-1656	0	0.0
W-1650	0	0.0
W-1652	0	0.0
W-1552	0	0.0
W-1651	0	0.0
W-1655	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation pilot test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and

Self-Monitoring Report (cont'd)
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____

Scott Kawaguchi

Date: 03-01-2009

Self-Monitoring Report

LLNL Portable Treatment Unit 10 (PTU10)

AREA TFD-HPD

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February	28															
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	0	0.0
W-1653	0	0.0
W-1657	0	0.0
W-1551	0	0.0
W-1654	0	0.0
W-1656	0	0.0
W-1650	0	0.0
W-1652	0	0.0
W-1552	0	0.0
W-1651	0	0.0
W-1655	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation pilot test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and

Self-Monitoring Report (cont'd)
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaga, Ci. Date: 04-01-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	<u>29</u>	30

Total monthly time facility operated (hours): 1

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-29-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.5</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	1,128	17.2
W-1510	194	2.9
W-1504	186	2.8
Total:	<u>1,508</u>	<u>22.9</u>


5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,508</u>

6. Comments:

System secured on 5/7/08 due to malfunctioning water level transducers in wells W-1503 and W-1510. PTU2 has not been repaired and restarted due to a FY 2008 funding reduction. System operated on 1/29/09 to collect monthly samples and readings. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-02-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	0	0.0
W-1510	0	0.0
W-1504	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System secured on 5/7/08 due to malfunctioning water level transducers in wells W-1503 and W-1510. PTU2 has not been repaired and restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-02-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 96

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-16-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 21.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	79,784	18.2
W-1510	22,615	0.0
W-1504	30,771	0.0
Total:	<u>133,170</u>	<u>18.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>133,170</u>

6. Comments:

2/17/09 through 3/16/09 facility maintenance and repair preformed on treatment unit. 3/16/09 through 3/31/09 system operations varied for system check-out and as needed repairs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-31-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **728**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **01-12-2009**
Influent pH: **7.0**
Effluent pH: **7.5**
Effluent Temperature (°C): **18.7**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	0	0.0
W-1403	0	0.0
W-1308	155,966	3.7
W-1904	0	0.0
W-2005	60,884	1.3
SIP-ETC-201	0	0.0
Total:	<u>216,850</u>	<u>5.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>216,850</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **01-30-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 683

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-05-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 18.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	0	0.0
W-1403	0	0.0
W-1308	136,605	3.4
W-1904	0	0.0
W-2005	62,077	1.3
SIP-ETC-201	0	0.0
Total:	<u>198,682</u>	<u>4.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>198,682</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Karaguz Date: 03-01-2009

Self-Monitoring Report

LLNL Portable Treatment Unit 11 (PTU11)

AREA TFD-SE

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
 March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 755

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-03-2009
 Influent pH: 7.0
 Effluent pH: 7.5
 Effluent Temperature (°C): 17.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	0	0.0
W-1403	0	0.0
W-1308	149,916	3.3
W-1904	0	0.0
W-2005	87,702	1.4
SIP-ETC-201	0	0.0
Total:	<u>237,618</u>	<u>4.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>237,618</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Caragui Date: 03-31-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 12 (PTU12)
AREA TFD-SS

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 731

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-13-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.9

4. Wellfield Data:

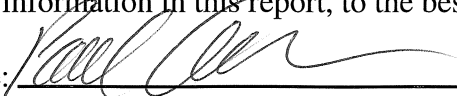
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	338,515	7.7
W-1603	0	0.0
W-1602	209,368	4.7
W-1601	48,361	1.2
Total:	<u>596,244</u>	<u>13.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>596,244</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-02-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 12 (PTU12)
AREA TFD-SS

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 680

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-31-2009</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.4</u>

4. Wellfield Data:

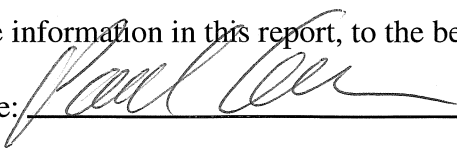
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	313,649	7.7
W-1603	0	0.0
W-1602	195,481	4.8
W-1601	49,273	1.2
Total:	<u>558,403</u>	<u>13.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>558,403</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 12 (PTU12)
AREA TFD-SS

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 771

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-28-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 21.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	343,978	7.6
W-1603	0	0.0
W-1602	216,826	4.8
W-1601	56,618	1.2
Total:	<u>617,422</u>	<u>13.6</u>

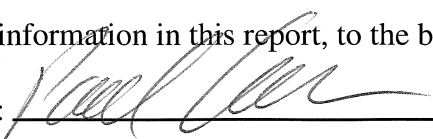
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>617,422</u>

6. Comments:

W-1603 secure pending well pump repairs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-31-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January **01** **02** **03** **04** **05** **06** **07** **08** **09** 10 11 **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **589**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **01-14-2009**
Influent pH: **7.5**
Effluent pH: **7.5**
Effluent Temperature (°C): **21.5**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1216	151,107	4.1
W-1215	0	0.0
W-1902	412,569	12.3
Total:	<u>563,676</u>	<u>16.4</u>

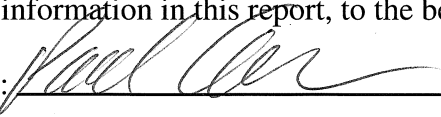
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>563,676</u>

6. Comments:

System shut down from 1/9/09 to 1/12/09 due to erroneous leak alarm.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-02-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 679

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-31-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 21.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1216	183,312	4.5
W-1215	0	0.0
W-1902	404,946	10.2
Total:	<u>588,258</u>	<u>14.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>588,258</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 772

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-09-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 21.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1216	207,192	4.5
W-1215	0	0.0
W-1902	446,422	9.8
Total:	<u>653,614</u>	<u>14.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>653,614</u>

6. Comments:

W-1215 secure pending well pump repairs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-31-2009

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

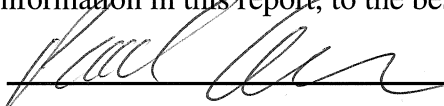
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2004B	0	0.0	0	0	0
W-ETC-2004A	0	0.0	0	0	0
W-ETC-2003	0	0.0	0	0	0
SIP-ETC-201	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 8/12/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-02-2009**

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

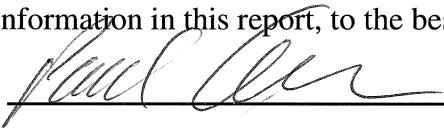
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2004B	0	0.0	0	0	0
W-ETC-2004A	0	0.0	0	0	0
W-ETC-2003	0	0.0	0	0	0
SIP-ETC-201	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 8/12/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2009

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treatment facility operated

February	28														
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30 31

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2003	0	0.0	0	0	0
W-ETC-2004B	0	0.0	0	0	0
W-ETC-2004A	0	0.0	0	0	0
SIP-ETC-201	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 8/12/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-01-2009**

Self-Monitoring Report

LLNL Vapor Extraction System 07 (VES07)

AREA VTFD-HPD

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1651	0	0.0	0	0	0
W-1653	0	0.0	0	0	0
W-1657	0	0.0	0	0	0
W-1654	0	0.0	0	0	0
W-1652	0	0.0	0	0	0
W-1552	0	0.0	0	0	0
W-1655	0	0.0	0	0	0
W-1656	0	0.0	0	0	0
W-1650	0	0.0	0	0	0
W-HPA-002A	0	0.0	0	0	0
W-HPA-002B	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott K. Morgan Date: 02-03-2009

Self-Monitoring Report

LLNL Vapor Extraction System 07 (VES07)

AREA VTFD-HPD

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1651	0	0.0	0	0	0
W-1653	0	0.0	0	0	0
W-1657	0	0.0	0	0	0
W-1654	0	0.0	0	0	0
W-1652	0	0.0	0	0	0
W-1552	0	0.0	0	0	0
W-1655	0	0.0	0	0	0
W-1656	0	0.0	0	0	0
W-1650	0	0.0	0	0	0
W-HPA-002A	0	0.0	0	0	0
W-HPA-002B	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 07 (VES07)

AREA VTFD-HPD

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treatment facility operated

February	28															
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1651	0	0.0	0	0	0
W-1653	0	0.0	0	0	0
W-1657	0	0.0	0	0	0
W-1654	0	0.0	0	0	0
W-1652	0	0.0	0	0	0
W-1552	0	0.0	0	0	0
W-1655	0	0.0	0	0	0
W-1656	0	0.0	0	0	0
W-1650	0	0.0	0	0	0
W-HPA-002A	0	0.0	0	0	0
W-HPA-002B	0	0.0	0	0	0

Total:	<u>0</u>	<u>0.0</u>			
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4. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 13 (VES13)

AREA VTFD-HS

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-653	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 6-7-07 due to a failed blower motor. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Stott Kawaguchi Date: 02-03-2009

Self-Monitoring Report

LLNL Vapor Extraction System 13 (VES13)

AREA VTFD-HS

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-653	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 6-7-07 due to a failed blower motor. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 13 (VES13)

AREA VTFD-HS

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treatment facility operated

February	28																	
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15			
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-653	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 6-7-07 due to a failed blower motor. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-01-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 3 (PTU3)
AREA TFE-E

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	0	0.0
W-1109	0	0.0
W-1903	0	0.0
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System shut down and was secured on 6/2/08 due to electronic (PLC) failure.
Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-03-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 3 (PTU3)
AREA TFE-E

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	0	0.0
W-1109	0	0.0
W-1903	0	0.0
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>0</u>	<u>0.0</u>

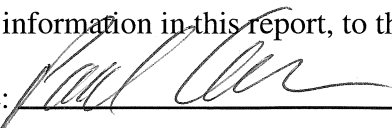
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System shut down and was secured on 6/2/08 due to electronic (PLC) failure.
Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized
order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-02-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 3 (PTU3)
AREA TFE-E

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February	28														
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30 31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	0	0.0
W-1109	0	0.0
W-1903	0	0.0
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>0</u>	<u>0.0</u>

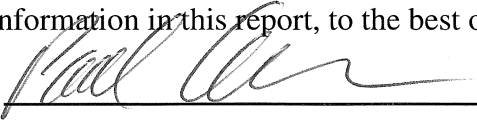
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System shut down and was secured on 6/2/08 due to electronic (PLC) failure.
Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized
order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-01-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 5

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-01-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	399	0.0
W-2012	1,669	5.3
Total:	<u>2,068</u>	<u>5.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,068</u>

6. Comments:

System secured 6/10/08 due to concerns regarding W-2012 pump cycling on and off. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources. System was started on 1/27/09 to collect samples according to the TFE-HS Initial Sampling Plan then secured. System operated under day-time operations only 1/28,29,30/09 for system evaluation.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31																	
February	01	02	<u>03</u>	<u>04</u>	05	06	07	08	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	14	15			
	16	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	26	27						

Total monthly time facility operated (hours): 238

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-12-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>18.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	1,129	5.2
W-2012	230,951	5.2
Total:	<u>232,080</u>	<u>10.4</u>

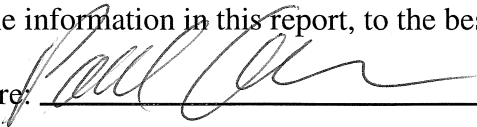
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>232,080</u>

6. Comments:

2/3/09 and 2/4/09 system operated briefly for electronic and interlock check out.
2/9/09 through 2/13/09 system operated during day time hours only. 2/17/09
through 2/25/09 system operated 24 hours a day at various flow rates for system
evaluation. On 2/25/09 system was secured per TFE-HS Step Test Plan.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-03-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 511

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-10-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 22

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2012	382,563	5.2
W-2105	0	0.0
Total:	<u>382,563</u>	<u>5.2</u>

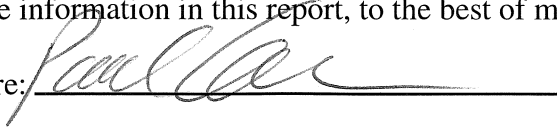
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>382,563</u>

6. Comments:

3/10/09 started system operations per TFE-HS Extraction Well Field Start-Up Plan. Prior to 3/10/09 system secure to allow well field water levels to recover before implementing start up.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-02-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 734

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-12-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 22.1

4. Wellfield Data:

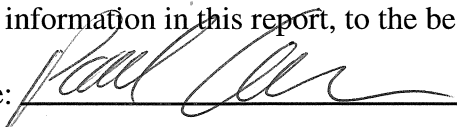
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	800,332	18.4
W-1409	0	0.0
Total:	<u>800,332</u>	<u>18.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>800,332</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-02-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 683

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-04-2009</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>22.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	741,231	18.3
W-1409	0	0.0
Total:	<u>741,231</u>	<u>18.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>741,231</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 774

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-09-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 22.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	824,480	18.2
W-1409	0	0.0
Total:	<u>824,480</u>	<u>18.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>824,480</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-31-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	0	0.0
Total:	<u>0</u>	<u>0.0</u>

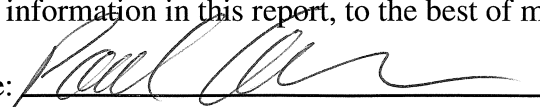
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

Facility shut down on 4/2/08 due to pump failure in W-359, repairs pending. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-02-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

Facility shut down on 4/2/08 due to pump failure in W-359, repairs pending. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2009

Operator Signature: Paul Chen Date: **04-01-2009**

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 717

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-01-2009
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 14.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1520	15	1.3
W-1518	1	0.0
W-1522	58,936	1.4
Total:	<u>58,952</u>	<u>2.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>58,952</u>

6. Comments:

W-1518 is down. Was not sampled. W-1520 ran only to take sample.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Brian Mitchell Date: 02-02-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 669

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-31-2009
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 14

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1520	0	0.0
W-1518	0	0.0
W-1522	54,997	1.3
Total:	<u>54,997</u>	<u>1.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>54,997</u>

6. Comments:

N/A

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Brian Mitchell Date: 03-02-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 763

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-02-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 19.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1520	0	0.0
W-1518	0	0.0
W-1522	62,319	1.3
Total:	<u>62,319</u>	<u>1.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>62,319</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Eric Mitchell Date: 04-01-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 717

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-07-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 18.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-305	381,250	8.9
W-292	258,497	6.0
Total:	<u>639,747</u>	<u>14.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>639,747</u>

6. Comments:

N/A

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Brian Mitchell Date: 02-02-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 667

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-03-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 18.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-305	355,332	8.8
W-292	241,344	6.0
Total:	<u>596,676</u>	<u>14.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>596,676</u>

6. Comments:

N/A

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Brian Mitchell Date: 03-02-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 764

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-04-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 19.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-305	404,828	8.8
W-292	276,081	6.0
Total:	<u>680,909</u>	<u>14.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>680,909</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Brian Mitchell Date: 04-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFE-ELM

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

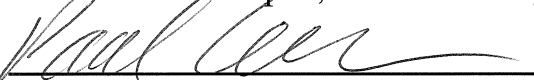
3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1909	0	0.0	0	0	0
W-1903	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-003	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-1908	0	0.0	0	0	0
 Total:	 <u>0</u>	 <u>0.0</u>			

4. Comments:

This treatment facility was shut down on 2/06/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-02-2009

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFE-ELM

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

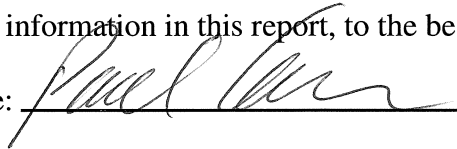
3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1909	0	0.0	0	0	0
W-1903	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-003	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-1908	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 2/06/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2009

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFE-ELM

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treatment facility operated

February	28																															
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15																	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31																

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	0	0.0	0	0	0
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-003	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-1908	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 2/06/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-01-2009**

Self-Monitoring Report

LLNL Vapor Extraction System 12 (VES12)

AREA VTFE-HS

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-2010B	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2009	0	0.0	0	0	0
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	0	0.0	0	0	0
W-2105	0	0.0	0	0	0
<div style="display: flex; justify-content: space-between;"> Total: <u>0</u> <u>0.0</u> </div>					

4. Comments:

Facility did not operate in the month of Jan. 2009. Facility failed on 3/10/08 due to a catastrophic motor failure in the liquid ring vacuum pump. DOE and the regulatory agencies were notified of this action. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2009

Self-Monitoring Report

LLNL Vapor Extraction System 12 (VES12)

AREA VTFE-HS

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-2010B	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2009	0	0.0	0	0	0
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	0	0.0	0	0	0
W-2105	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

Facility did not operate in the month of February 2009. Facility failed on 3/10/08 due to a catastrophic motor failure in the liquid ring vacuum pump. DOE and the regulatory agencies were notified of this action. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-03-2009

Operator Signature: Am Thomas Date: **04-06-2009**

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **721**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **01-12-2009**
Influent pH: **7.0**
Effluent pH: **7.0**
Effluent Temperature (°C): **19.9**

4. Wellfield Data:

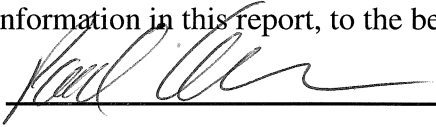
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	385,351	8.9
Total:	<u>385,351</u>	<u>8.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>385,351</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-02-2009**

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month January Year 2009

2. Date compliance sampling performed 01-12-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>9.6</u>
6-day total precipitation (in):	<u>.02</u>
Average wind speed/direction (mph):	<u>4/ E</u>

4. Receiving Data:

Sample Location	pH	Temperature (C)
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

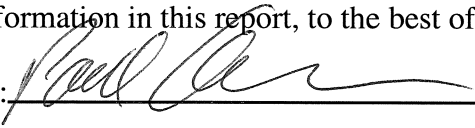
5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

Annual Samples not collected in January due to lack of water at sampling location.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-02-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>31</u>																	
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>			
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>						

Total monthly time facility operated (hours): 670

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-05-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	358,943	8.9
Total:	<u>358,943</u>	<u>8.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>358,943</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2009

Land Observation Report date:
TFG-ASW - Arroyo Seco

1. Reporting Period: Business Month February Year 2009
2. Date compliance sampling performed 02-05-2009
3. Weather Conditions:

Average air tempertaure (°C):	<u>10.8</u>
6-day total precipitation (in):	<u>.03</u>
Average wind speed/direction (mph):	<u>3/ ESE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

Annual Samples not collected in February due to lack of water at sampling location.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 759

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-28-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	405,271	8.8
Total:	<u>405,271</u>	<u>8.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>405,271</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-31-2009

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month March Year 2009

2. Date compliance sampling performed 03-18-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>11.8</u>
6-day total precipitation (in):	<u>0</u>
Average wind speed/direction (mph):	<u>5/ SSW</u>

4. Receiving Data:

<u>Sample</u> <u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>7.0</u>	<u>21.6</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

Annual Receiving water samples taken on 3/18/09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-31-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1807	0	0.0
W-1806	0	0.0
Total:	<u>0</u>	<u>0.0</u>

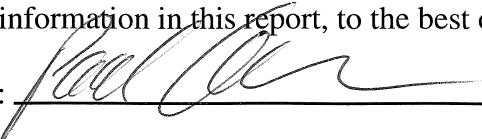
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System shut down on 6/20/08 due to high sump alarm. System secured until repairs can be made. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-02-2009**

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1807	0	0.0
W-1806	0	0.0
Total:	<u>0</u>	<u>0.0</u>

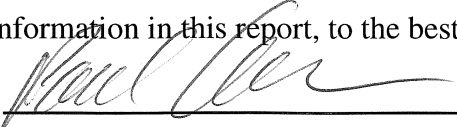
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System shut down on 6/20/08 due to high sump alarm. System secured until repairs can be made. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-02-2009**

Self-Monitoring Report

LLNL Mini Treatment Unit 02 (MTU02)

AREA TFG-N

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February	28															
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1807	0	0.0
W-1806	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System shut down on 6/20/08 due to high sump alarm. System secured until repairs can be made. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-01-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 732

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-13-2009

Influent pH: 7.0

Effluent pH: 7.5

Effluent Temperature (°C): 24.7

4. Wellfield Data:

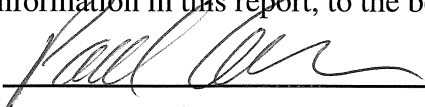
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	145	4.3
W-1310	699,811	15.9
GSW-445	138	4.2
Total:	<u>700,094</u>	<u>24.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>700,094</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-05-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 681

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-05-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 25

4. Wellfield Data:

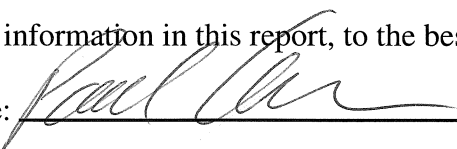
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	123	4.1
W-1310	652,745	15.9
GSW-445	126	4.3
Total:	<u>652,994</u>	<u>24.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>652,994</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 770

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-10-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 25.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	0	0.0
W-1310	739,374	16.4
GSW-445	0	0.0
Total:	<u>739,374</u>	<u>16.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>739,374</u>

6. Comments:

3/24/09 well pump removed from GSW-445. 3/26/09 GSW-445 sampled using portable pump and 118 gallons of purge water taken to Solar Detox.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-01-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System secure until well W-1801 pump repairs can be completed. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-02-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	0	0.0
Total:	<u>0</u>	<u>0.0</u>

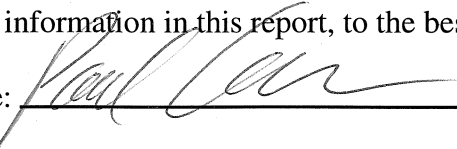
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System secure until well W-1801 pump repairs can be completed. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February	28														
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30 31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System secure until well W-1801 pump repairs can be completed. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-01-2009**

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-23-2009**

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31																
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15		
	16	17	18	19	20	21	22	23	24	25	26	27					

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2009

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February	28														
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30 31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-01-2009

Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	0	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	0	0.0
SVB-518-204	0	0.0
SVB-518-201	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-27-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2009

Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31																
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15		
	16	17	18	19	20	21	22	23	24	25	26	27					

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	0	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	0	0.0
SVB-518-204	0	0.0
SVB-518-201	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-27-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-01-2009**

Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	0	0.0
W-518-1913	0	0.0
W-518-1915	0	0.0
W-518-1914	0	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-27-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-01-2009**

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

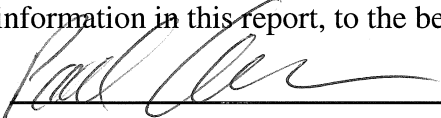
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 7/27/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-02-2009

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 7/27/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2009

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February	28														
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30 31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 7/27/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-01-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	0	0.0
W-1415	0	0.0
Total:	<u>0</u>	<u>0.0</u>

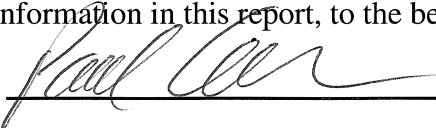
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-02-2009**

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	0	0.0
W-1415	0	0.0
Total:	<u>0</u>	<u>0.0</u>

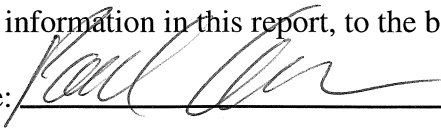
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-02-2009**

Operator Signature: [Signature] Date: **04-01-2009**

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1608	0	0.0
W-1605	0	0.0
W-1604	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

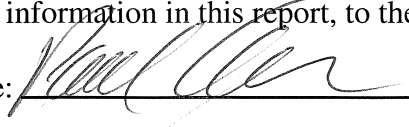
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 8/31/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-02-2009**

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

January	31																
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15		
	16	17	18	19	20	21	22	23	24	25	26	27					

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1608	0	0.0
W-1605	0	0.0
W-1604	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

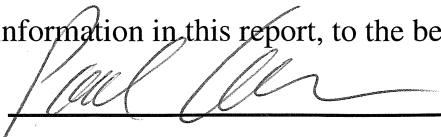
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 8/31/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-02-2009**

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

February	28														
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30 31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1608	0	0.0
W-1605	0	0.0
W-1604	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 8/31/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-01-2009**

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30


3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	0	0.0	0	0	0
W-514-2007A	0	0.0	0	0	0
W-514-2007B	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

A data review conducted in late June indicates that recent flow totals for this facility are suspect. The facility was shutdown on 6/26 and will remain down until issues with the flow totals are resolved. Did not operate in the month of Jan. 2009. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2009

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-217	0	0.0	0	0	0
W-514-2007A	0	0.0	0	0	0
W-514-2007B	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

A data review conducted in late June indicates that recent flow totals for this facility are suspect. The facility was shutdown on 6/26 and will remain down until issues with the flow totals are resolved. Did not operate in the month of Feb. 2009. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Hornes Date: 03-03-2009

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treatment facility operated

February	28																			
March	01	02	03	04	05	06	07	08	09	10	<u>11</u>	<u>12</u>	<u>13</u>	14	15					
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	21	22	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>				

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	201,454	28.9	-4	68	186
W-514-2007B	113,882	13.2	-3.7	68	186
W-514-2007A	37,119	5.6	-4.4	68	186
Total:	<u>352,455</u>	<u>47.7</u>			

4. Comments:

Soil vapor extraction reactivated 3/11/09 at VTF-406 Hotspot. Facility was shutdown 6/26/08 due to suspect flow totals. Prior to start of operation, corrective actions were taken to resolve issues with facility flow and totalizer measurements, and detailed in the facility test and verification document. Facility and wellfield totalizers were zeroed 3/17/09, volumes extracted at months end incorporated with previous cumulative values to reflect actual volumes extracted for reporting month.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____



Date: 04-14-2009

Self-Monitoring Report

LLNL Vapor Extraction System 14 (VES14)

AREA VTF511

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-274	0	0.0	0	0	0
W-2208A	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	0	0.0	0	0	0
W-1517	0	0.0	0	0	0
W-2208B	0	0.0	0	0	0
W-2204	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

Did not operate in the month of Jan. Facility was discovered non-operational on Mon. 8/18/08 with no available electronic data, no indication of date or time of failure. SMR data is based on log book data collected on Friday 8/15/08.

Operational days and totals may need to be revised once the electronic data has been evaluated. Facility is currently non-operational. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2009

Self-Monitoring Report

LLNL Vapor Extraction System 14 (VES14)

AREA VTF511

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-274	0	0.0	0	0	0
W-2208A	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	0	0.0	0	0	0
W-1517	0	0.0	0	0	0
W-2208B	0	0.0	0	0	0
W-2204	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

Did not operate in the month of February 2009. Facility was discovered non-operational on Mon. 8/18/08 with no available electronic data, no indication of date or time of failure. SMR data is based on log book data collected on Friday 8/15/08. Operational days and totals may need to be revised once the electronic data has been evaluated. Facility is currently non-operational. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Roman Date: 03-03-2009

Self-Monitoring Report

LLNL Vapor Extraction System 14 (VES14)

AREA VTF511

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treatment facility operated

February	28																	
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15			
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-274	0	0.0	0	0	0
W-2208A	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	0	0.0	0	0	0
W-1517	0	0.0	0	0	0
W-2208B	0	0.0	0	0	0
W-2204	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

VTF-511 did not operate in the month of March 2009. Facility was discovered non-operational on Mon. 8/18/08 with no available electronic data, no indication of date or time of failure. SMR data is based on log book data collected on Friday 8/15/08. Operational days and totals may need to be revised once the electronic data has been evaluated. Facility is currently non-operational. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-06-2009

Self-Monitoring Report

LLNL Vapor Extraction System 19 (VES19)

AREA VTF518-PZ

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30


3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	0	0.0	0	0	0
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-02-2009

Self-Monitoring Report

LLNL Vapor Extraction System 19 (VES19)

AREA VTF518-PZ

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	31															
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
	16	17	18	19	20	21	22	23	24	25	26	27				

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	0	0.0	0	0	0
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-02-2009

Self-Monitoring Report

LLNL Vapor Extraction System 19 (VES19)

AREA VTF518-PZ

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treatment facility operated

February	28																	
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15			
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	0	0.0	0	0	0
W-518-1913	0	0.0	0	0	0
W-518-1915	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 01 (VES01)

AREA VTF5475

1. Reporting Period: Business Month January Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 02-03-2009

Self-Monitoring Report

LLNL Vapor Extraction System 01 (VES01)

AREA VTF5475

1. Reporting Period: Business Month February Year 2009

2. Dates (in **bold** and underline) treatment facility operated

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

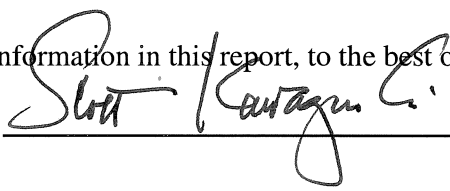
4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 01 (VES01)

AREA VTF5475

1. Reporting Period: Business Month March Year 2009

2. Dates (in **bold** and underline) treatment facility operated

February	28																	
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15			
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kouragan Date: 04-01-2009

Attachment C

Lake Haussmann

Attachment C

Lake Haussmann First Quarter 2009 Monitoring Program Summary

This attachment summarizes sampling requirements for LLNL Environmental Protection Department for discharge from Lake Haussmann. Lake Haussmann is an engineered water body that has a 37 acre-ft capacity. It is located in the central portion of the Livermore Site (Fig. C-1) and receives storm water runoff and treated ground water discharges.

Samples are collected from water discharged from Lake Haussmann and analyzed as outlined in Jackson (2002). The discharge samples are used to determine compliance with discharge limits in the *Record of Decision* (DOE, 1992), and the subsequent *Explanation of Significant Differences for Metals Discharge Limits* (Berg et al., 1997).

Dry season (June, July, August, September) discharges are sampled at each manual release or monthly during periods of continual release. Wet season (October through May) discharge samples are collected at the first release of the wet season and one other discharge in conjunction with a storm water monitoring event. Analytic results of discharge samples collected at location CDBX are compared with the LLNL Arroyo Las Positas outfall sample results collected at location WPDC (Fig. C-1). The results for samples collected at locations CDBX and WPDC are presented in Table C-1. All PCBs were below detection limits. No metals exceed discharge limits. The pH values at the CDBX location did not exceed the desired range of 6.5 to 8.5. The pH has averaged 8.8 since 1998 at the CDBX sampling location and is typically elevated during summer due to increased photosynthesis.

Discharge from Lake Haussmann remained continuous during the first quarter. Lake Haussmann's upper weir gate was maintained at the lowered position during the entire first quarter so that releases occurred continuously to minimize changes in surface water level and allow for a more natural ecosystem.

References

- U.S. Department of Energy, *Record of Decision for the Lawrence Livermore National Laboratory, Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA, UCRL-AR-109105, (1992).
- Berg, L.L., E.N. Folsom, M.D. Dresen, R.W. Bainer, and A.L. Lamarre, Eds., *Explanation of Significant Differences for Metals Discharge Limits at the Lawrence Livermore National Laboratory, Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA, UCRL-AR-125927 (1997).
- Jackson, C.S., *Drainage Retention Basin Monitoring Plan Change*, Letter to Ms. Naomi Feger, San Francisco Bay RWQCB, Lawrence Livermore National Laboratory, Livermore, CA, WGMG02:175:CSJ:RW:kh, (December 6, 2002).

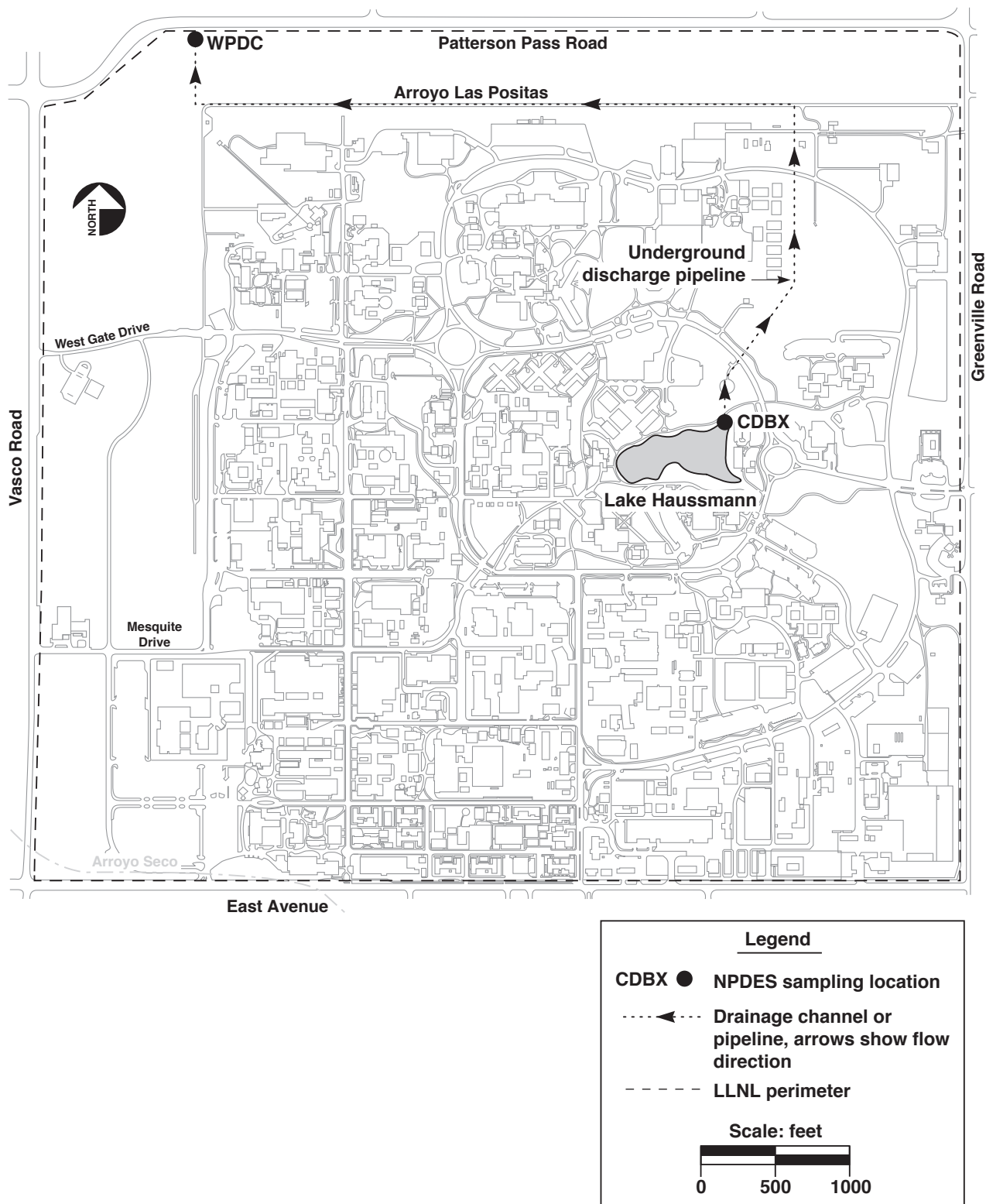
Table C-1 LLNL Lake Haussman release monitoring data for points CDBX and WPDC, January through March 2009.

			CDBX 1/22	WPDC 1/22	Discharge Limits 1-Apr through 30-Nov	Discharge Limits 1-Dec through 31-Mar
Physical			a	a		
pH	Units	EPA-150.1	7.96	7.61	not <6.5 or >8.5	not <6.5 or >8.5
Total dissolved solids (TDS)	mg/L	EPA-160.1	410.	180.	na	na
Total suspended solids (TSS)	mg/L	EPA-160.2	19.	25	na	na
Polychlorinated biphenyls			a			na
PCB 1016	ug/L	E8082A	< 0.5	b	na	na
PCB 1221	ug/L	E8082A	< 0.5	b	na	na
PCB 1232	ug/L	E8082A	< 0.5	b	na	na
PCB 1242	ug/L	E8082A	< 0.5	b	na	na
PCB 1248	ug/L	E8082A	< 0.5	b	na	na
PCB 1254	ug/L	E8082A	< 0.5	b	na	na
PCB 1260	ug/L	E8082A	< 0.5	b	na	na
Metals - Total			a	a		
Aluminum	mg/L	EPA-200.7	1.3	1.3	na	na
Antimony	mg/L	EPA-200.8	<0.002	<0.002	0.006	na
Arsenic	mg/L	EPA-200.8	0.003	<0.002	0.05	0.01
Barium	mg/L	EPA-200.7	0.12	0.066	na	na
Beryllium	mg/L	EPA-210.2	<0.0002	<0.0002	0.004	na
Boron	mg/L	EPA-200.7	1.3	0.46	na	na
Cadmium	mg/L	EPA-200.8	<0.001	<0.001	0.005	0.0022
Chromium	mg/L	EPA-200.8	<0.0030	<0.0030	0.05	na
Cobalt	mg/L	EPA-200.7	<0.05	<0.05	na	na
Copper	mg/L	EPA-200.8	0.0042	0.0054	1.3	0.0236
Hexavalent Chromium	mg/L	EPA-7196	0.00037	0.0053	na	0.022
Iron	mg/L	EPA-200.7	1.5	1.7	na	na
Lead	mg/L	EPA-200.8	0.001	0.0012	0.015	0.0064
Manganese	mg/L	EPA-200.8	0.035	0.033	0.5	0.5
Mercury	mg/L	EPA-245.1	<0.0002	<0.0002	0.002	0.002
Molybdenum	mg/L	EPA-200.8	0.003	0.0015	0.05	na
Nickel	mg/L	EPA-200.8	0.006	0.0046	0.1	0.32
Selenium	mg/L	EPA-200.8	<0.002	<0.002	0.05	0.01
Silver	mg/L	EPA-200.8	<0.001	<0.001	0.1	0.0082
Thallium	mg/L	EPA-200.8	<0.001	<0.001	0.002	na
Vanadium	mg/L	EPA-200.7	<0.010	<0.010	na	na
Zinc	mg/L	EPA-200.7	0.053	0.15	na	0.22

Volatile Organic Compounds			a			
1,1,1-Trichloroethane	ug/L	EPA-601	<0.5	b	na	na
1,1,2,2-Tetrachloroethane	ug/L	EPA-601	<0.5	b	na	na
1,1,2-Trichloroethane	ug/L	EPA-601	<0.5	b	na	na
1,1-Dichloroethane	ug/L	EPA-601	<0.5	b	5	5
1,1-Dichloroethene	ug/L	EPA-601	<0.5	b	5	5
1,2-Dichlorobenzene	ug/L	EPA-601	<0.5	b	na	na
1,2-Dichloroethane	ug/L	EPA-601	<0.5	b	5	5
1,2-Dichloroethene (total)	ug/L	EPA-601	<1	b	na	na
1,2-Dichloropropane	ug/L	EPA-601	<0.5	b	na	na
1,3-Dichlorobenzene	ug/L	EPA-601	<0.5	b	na	na
1,4-Dichlorobenzene	ug/L	EPA-601	<0.5	b	na	na
2-Chloroethylvinylether	ug/L	EPA-601	10.	b	na	na
Bromodichloromethane	ug/L	EPA-601	<0.5	b	na	na
Bromoform	ug/L	EPA-601	<0.5	b	na	na
Bromomethane	ug/L	EPA-601	<1	b	na	na
Carbon tetrachloride	ug/L	EPA-601	<0.5	b	5	5
Chlorobenzene	ug/L	EPA-601	<0.5	b	na	na
Chloroethane	ug/L	EPA-601	<0.5	b	na	na
Chloroform	ug/L	EPA-601	<0.5	b	na	na
Chloromethane	ug/L	EPA-601	<0.5	b	na	na
cis-1,2-Dichloroethene	ug/L	EPA-601	<0.5	b	5	5
cis-1,3-Dichloropropene	ug/L	EPA-601	<0.5	b	na	na
Dibromochloromethane	ug/L	EPA-601	<0.5	b	na	na
Dichlorodifluoromethane	ug/L	EPA-601	<0.5	b	na	na
Freon 113	ug/L	EPA-601	<0.5	b	na	na
Methyl t-Butyl Ether	ug/L	EPA-601	<0.5	b	na	na
Methylene chloride	ug/L	EPA-601	<1	b	na	na
Tetrachloroethene	ug/L	EPA-601	<0.5	b	4	4
Total Trihalomethanes	ug/L	EPA-601	<2	b	5	5
trans-1,2-Dichloroethene	ug/L	EPA-601	<0.5	b	5	5
trans-1,3-Dichloropropene	ug/L	EPA-601	<0.5	b	na	na
Trichloroethene	ug/L	EPA-601	<0.5	b	5	5
Trichlorofluoromethane	ug/L	EPA-601	<0.5	b	na	na
Vinyl chloride	ug/L	EPA-601	<0.5	b	2	2
Herbicides			a			
Glyphosate	ug/L	EPA-547	14.	6.7	na	na
Radiological						
Tritium	Bq/L	E906	<3.7	5.25	740	740

a) All analysis results for these analytes are below reporting limits.

b) Sampling for these analytes not required at this location.



ERD-S3R-08-0041

Figure C-1. Location of Lake Haussmann showing discharge sampling locations.

Attachment D

Figures

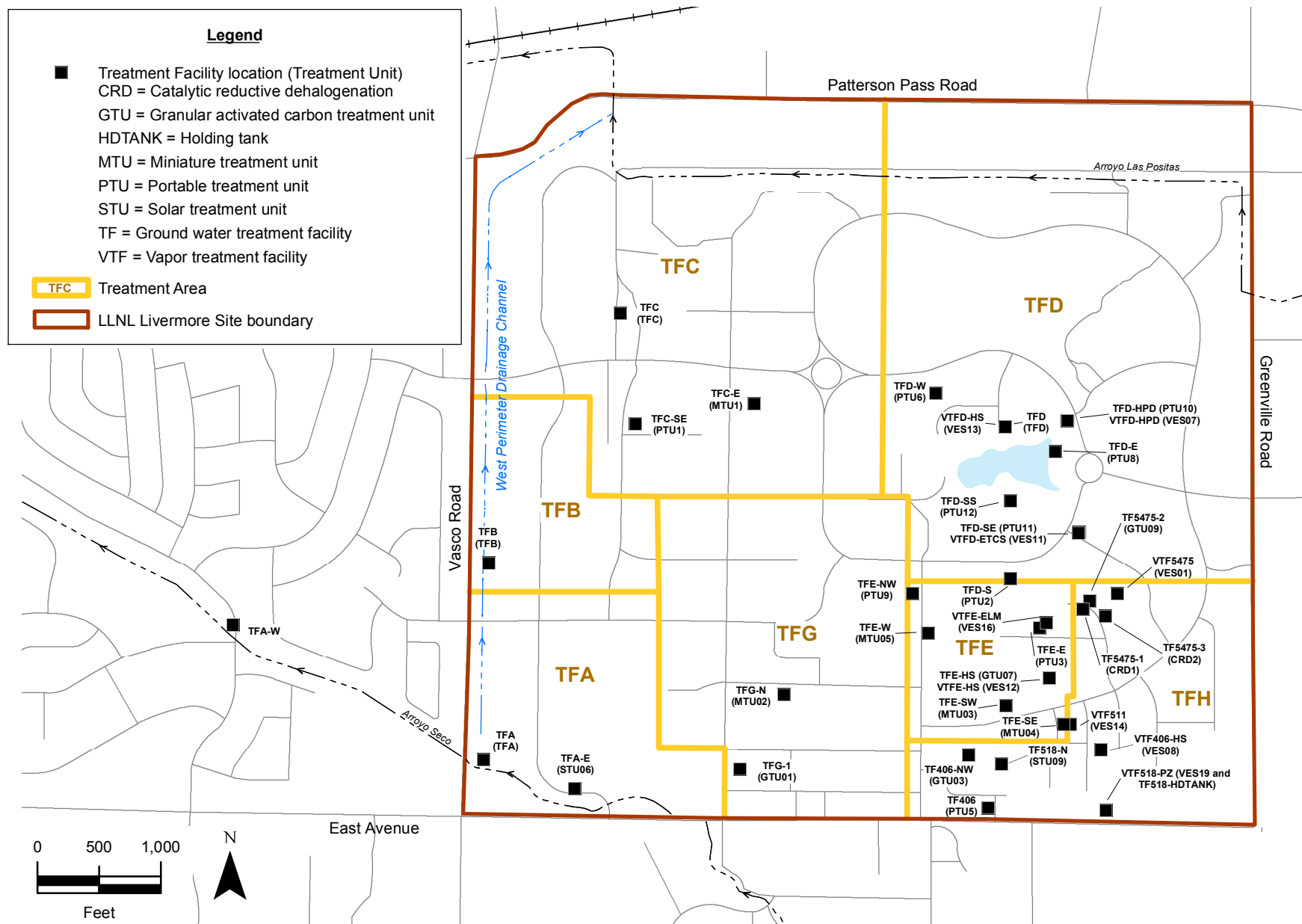


Figure 1. Livermore Site treatment areas and treatment facility locations.

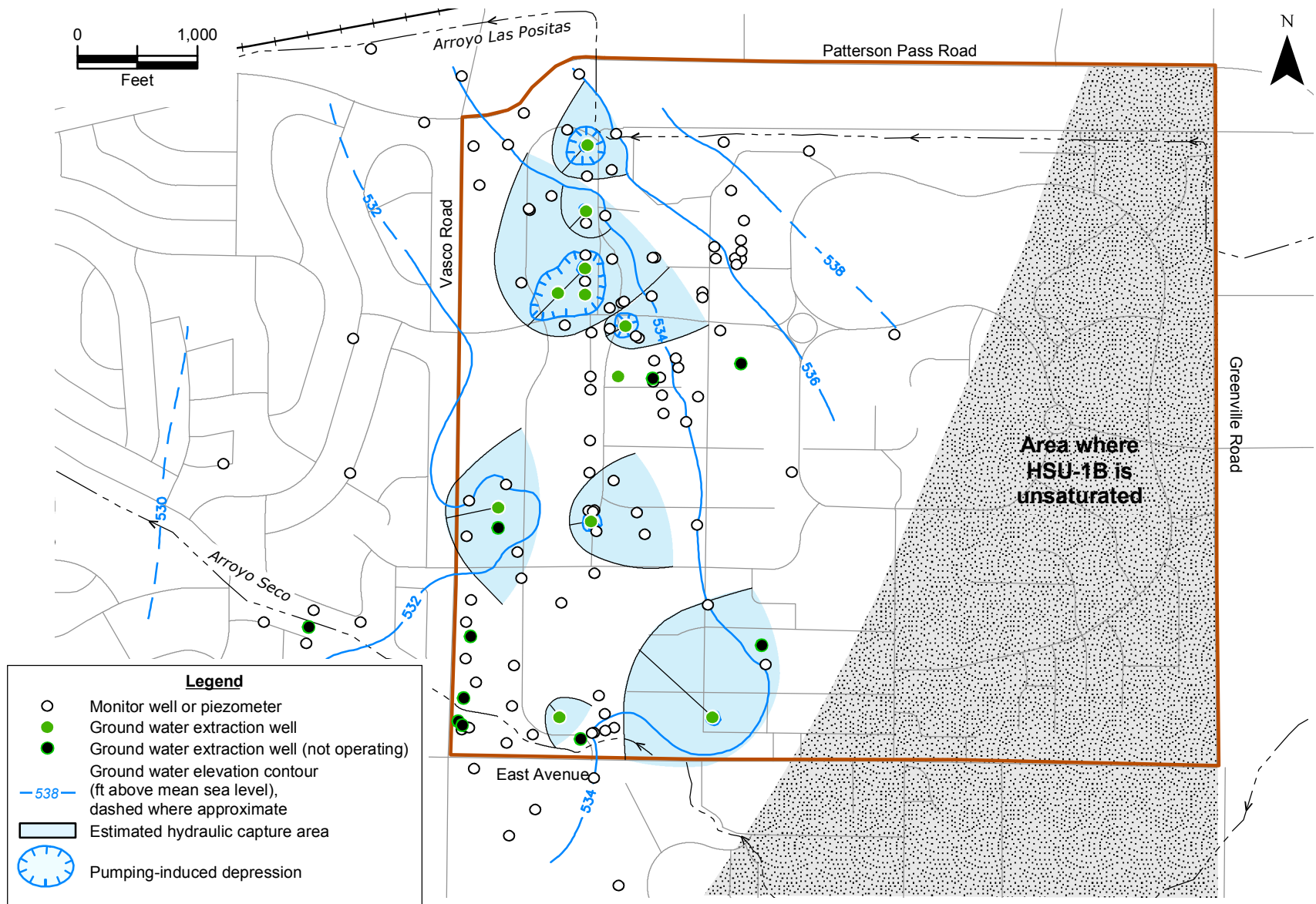


Figure 2. Ground water elevation contour map based on 131 wells completed within HSU-1B showing estimated hydraulic capture areas, LLNL and vicinity, January 2009.

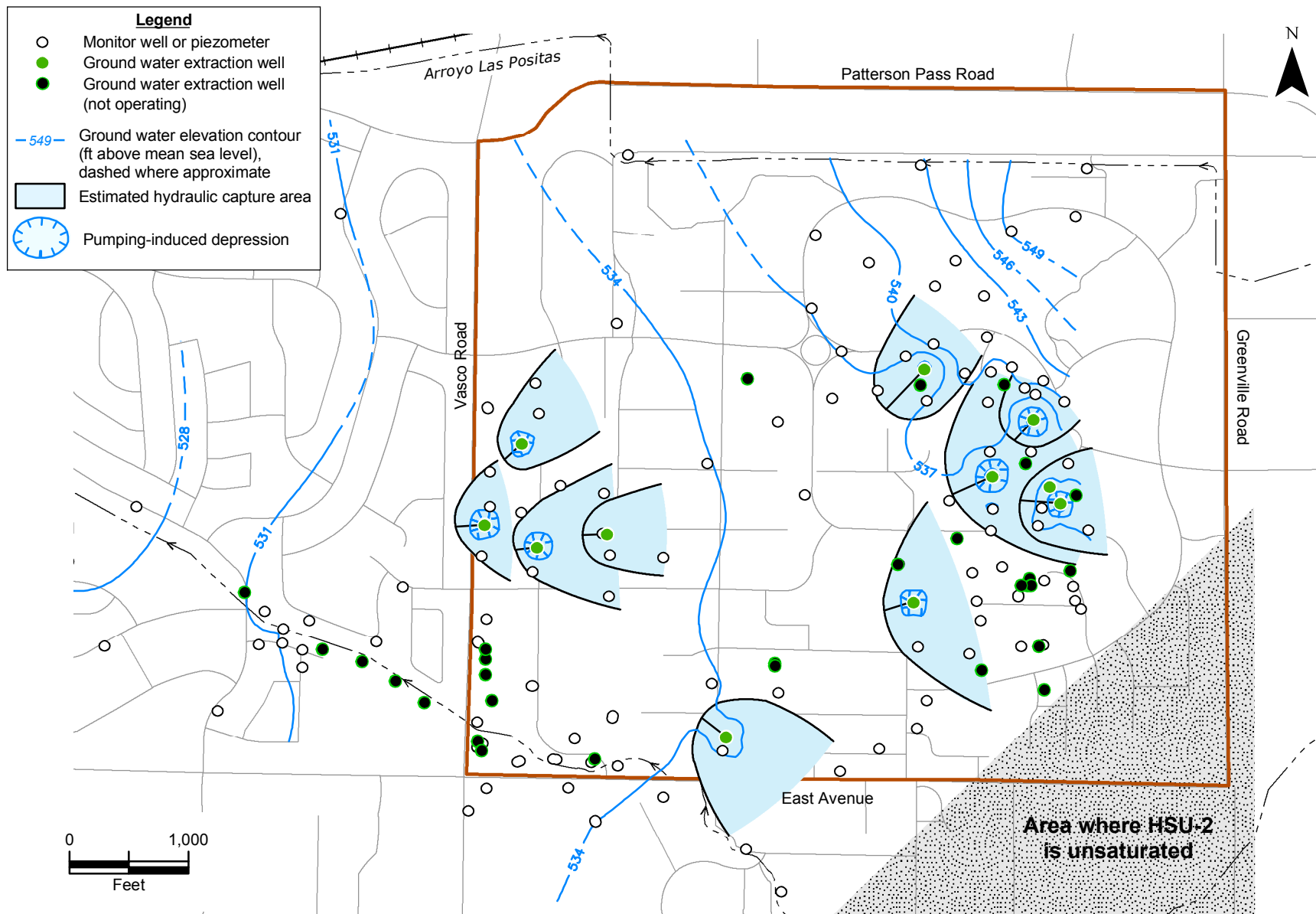


Figure 3. Ground water elevation contour map based on 160 wells completed within HSU-2 showing estimated hydraulic capture areas, LLNL and vicinity, January 2009.

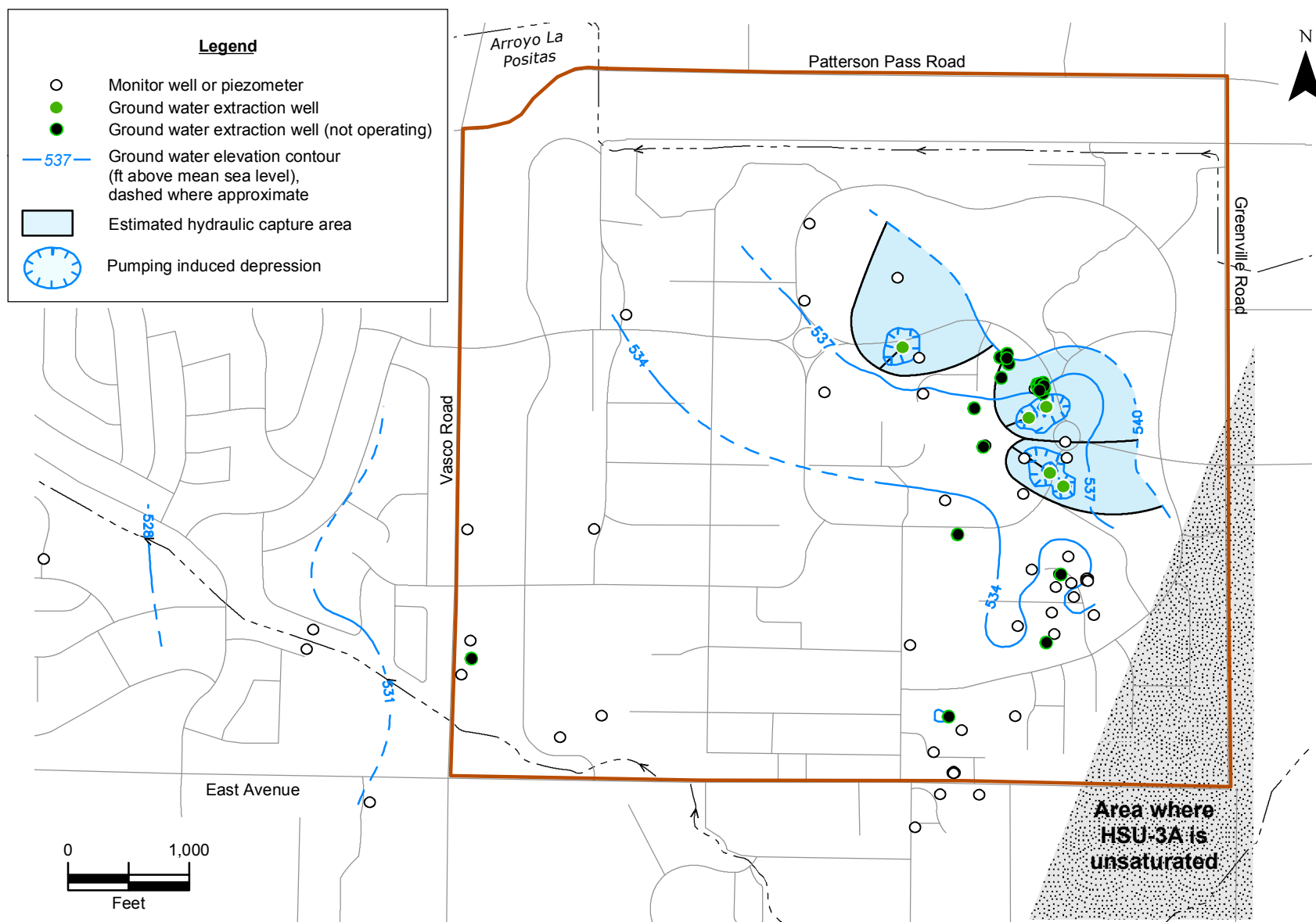


Figure 4. Ground water elevation contour map based on 76 wells completed within HSU-3A showing estimated hydraulic capture areas, LLNL and vicinity, January 2009.

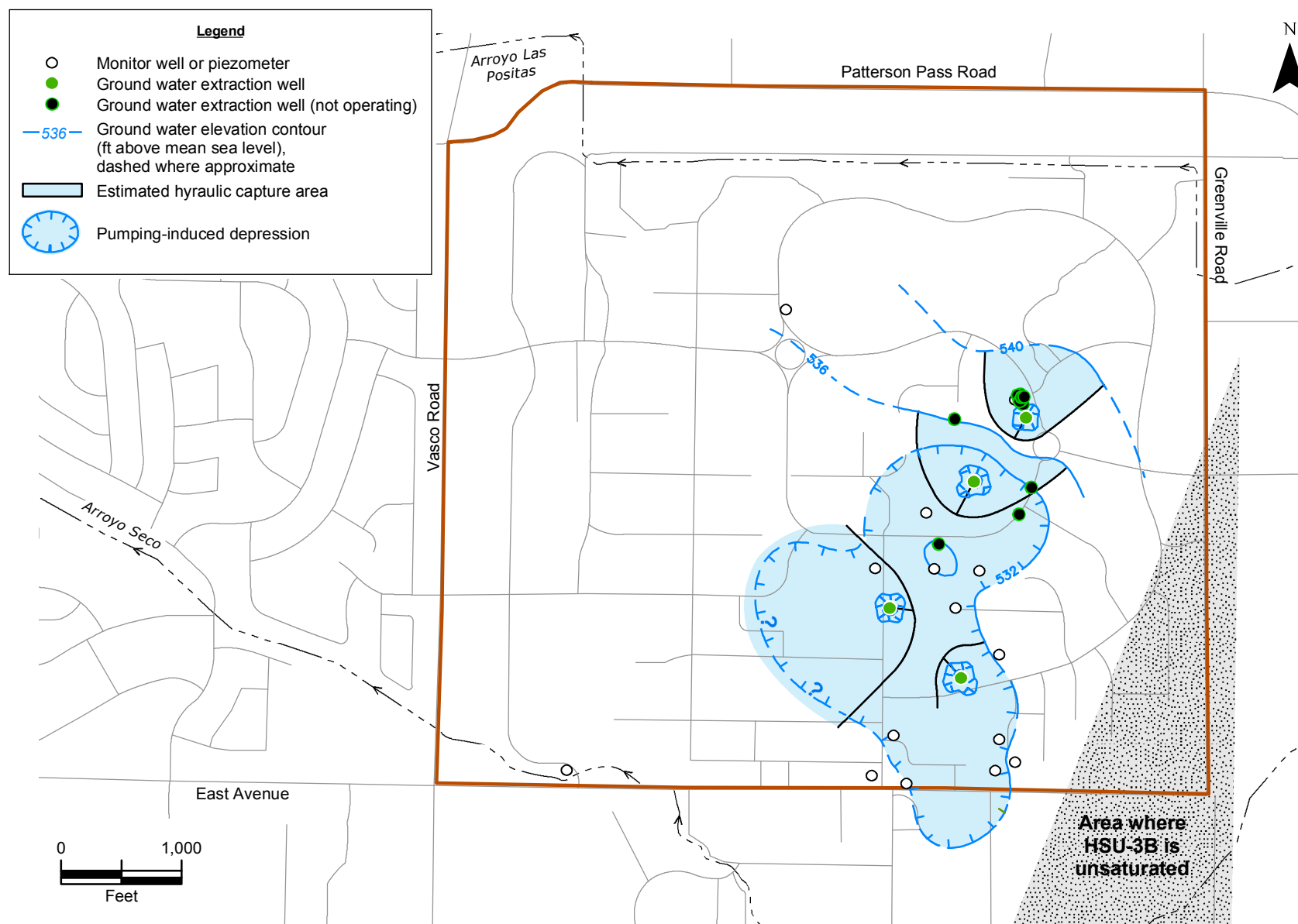


Figure 5. Ground water elevation contour map based on 30 wells completed within HSU-3B showing estimated hydraulic capture areas, LLNL and vicinity, January 2009.

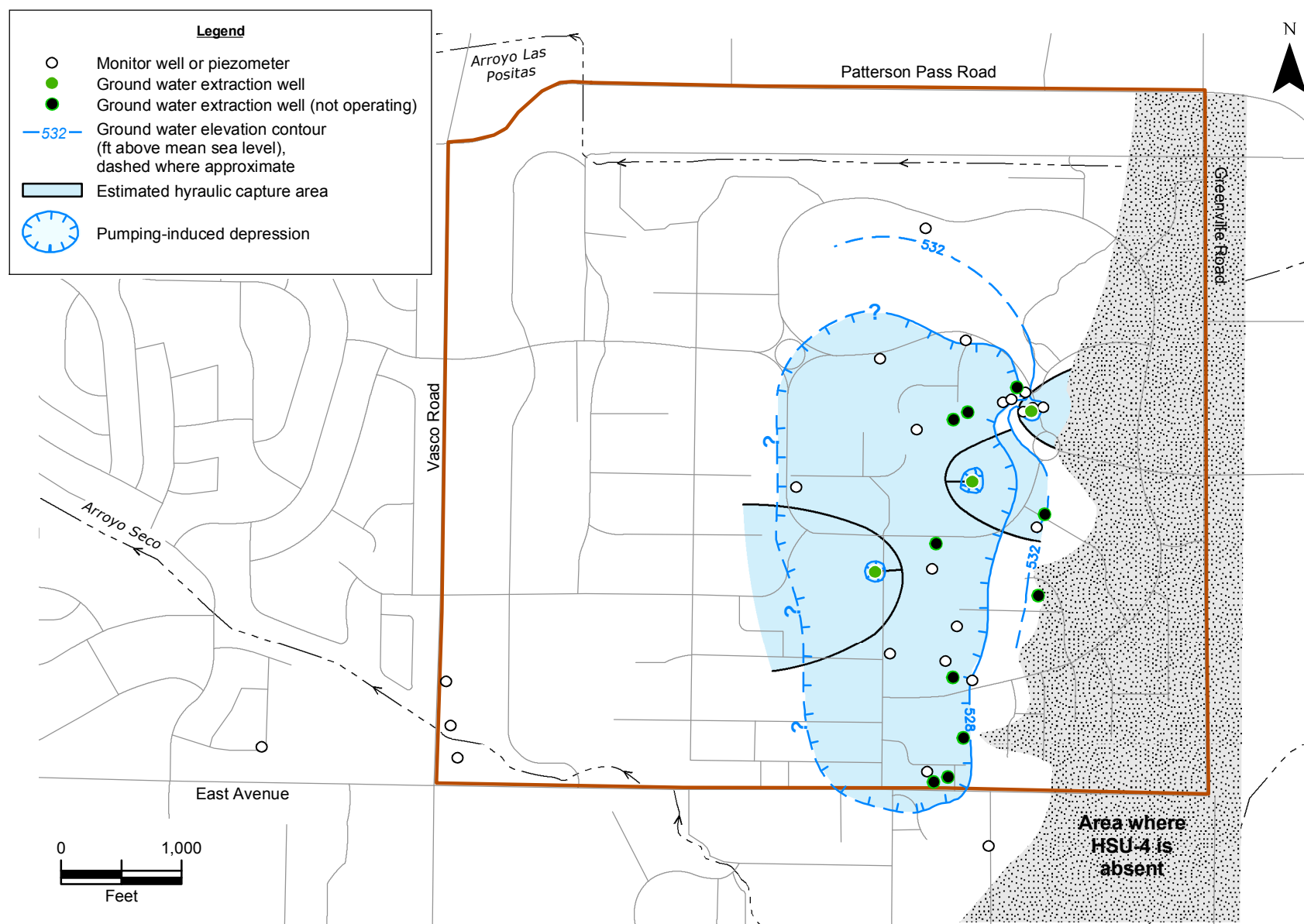


Figure 6. Ground water elevation contour map based on 36 wells completed within HSU-4 showing estimated hydraulic capture areas, LLNL and vicinity, January 2009.

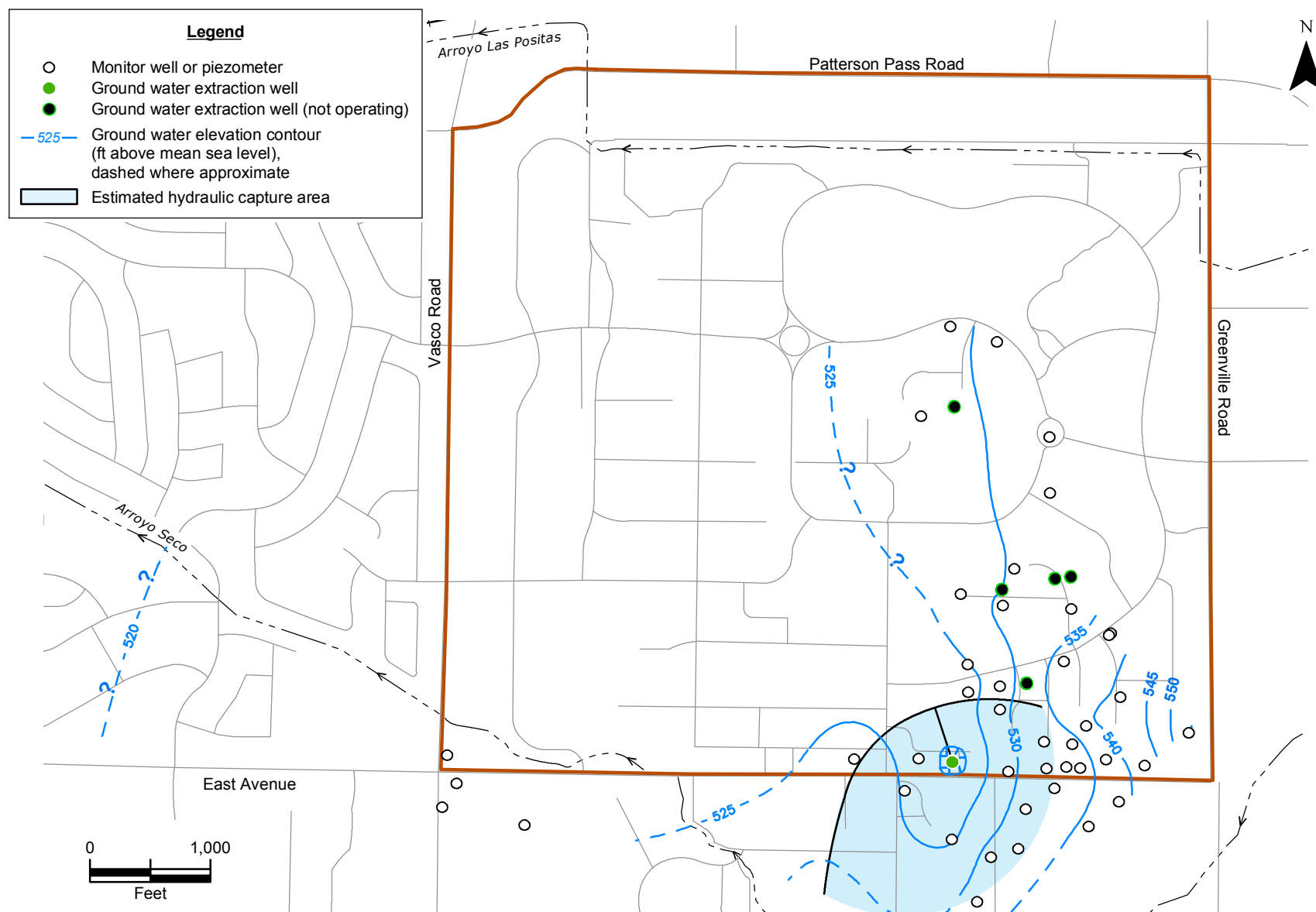


Figure 7. Ground water elevation contour map based on 49 wells completed within HSU-5 showing estimated hydraulic capture areas, LLNL and vicinity, January 2009.